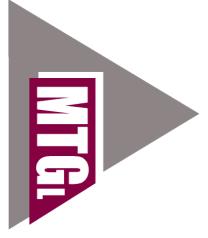
CLIENT COMPREHENSIVE ASBESTOS SURVEY REPORT FOR DEMOLITION

PROJECT NAME:

ORANGE COUNTY JUVENILE HALL-BUILDING 1

PROJECT ADDRESS:



331 The City Drive, S. Orange, California 92868

Prepared for:

Mr. Scott L. Battles Vanir Construction Management, Inc 4540 Duckhorn Drive, Suite 300 Sacramento, California 95834

Prepared by:

MTGL, Inc. 7742 Arjons Dr. San Diego, California 92126 858-537-3999

Project Number:

SDPE-24-061.1CT

Report By:

Michelle Ehresman, CAC

CAC Certification Number: 14-5323 CAC Expiration Date: November 19, 20204

Date of Report:

April 18, 2024

Version 1.0

TABLE OF CONTENTS

INTRODUCTIONSection 1
General Information
Project Information
Site/Building Description
Suspect Materials Observed
INVESTIGATION LIMITATIONS & WARRANTYSection 2
ASBESTOS SURVEY METHODOLOGYSection 3
General References
Visual Inspection
Homogeneous Material Classifications
Sampling Procedures
Laboratory Procedures
Method of Analysis
Laboratory Quality Control Program
ASBESTOS SURVEY OBSERVATIONS AND FINDINGS Section 4
Summary
Table 1: Positively Identified Materials that Contain Asbestos (ACM and ACCM) and
Assessment of Material Condition.
Table 2: Materials found to be Negative for Asbestos
General Information
Environmental Protection Agency (EPA)
California Occupational Safety & Health Agency (Cal/OSHA)
National Emission Standards for Hazardous Air Pollutants (NESHAP)
CONCLUSIONS & RECOMMENDATIONS Section 5
APPENDICES Section 6
Appendix 1 – Asbestos Laboratory Results & Chain of Custodies
Appendix 2 – Site Map with Sample Location
Appendix 3 – Photo Documentation
Appendix 4 – Inspector Certifications
Appendix 5- Addendum

SECTION 1 INTRODUCTION

GENERAL INFORMATION

MTGL, Inc. was retained to conduct a survey for suspect asbestos containing materials. The intent of this survey is to pre-determine the presence of EPA/OSHA regulated Asbestos Containing Materials and Asbestos Containing Construction Materials (ACCM) that may need to be addressed prior to scheduled demolition and/or renovation activities.

MTGL's scope of work was limited to the following:

- Review of project drawings.
- Conduct a pre-construction asbestos inspection limited to Client specified locations in accordance with NESHAP Regulations and the collection of bulk samples of suspect ACM.
- Submit samples to a NVLAP accredited laboratory for analysis of asbestos fiber content using polarized-light microscopy.
- Prepare report with material description, sampling locations, analytical results, and recommendations for proper handling/abatement prior to demolition and/or renovation activities.

PROJECT INFORMATION

Survey Requested/Authorized By: Mr. Scott L. Battles

Type of Survey Requested: Limited (Restricted to Client Specified Locations Only)

Destructive Sampling Allowed by Client: Yes

Project Name: ORANGE COUNTY JUVENILE HALL BUILDING 1

Project Address: 331 The City of Orange Dr. S in the city of Orange in the State of California.

Date of Inspection: April 1, 2024 to April 1, 2024

AHERA Certified Building Inspector Name: Darla Beery

AHERA Certified Building Inspector Number: 2023ABCA171101

Additional AHERA Certified Building Inspector Name: None Additional AHERA Certified Building Inspector Number: None

Local Air District: South Coast Air Quality Management District (Sampling method, lab

qualifications, lab analytical procedures, and lab method of analysis were performed in compliance with Rule 1403 (d)(1)(A) and 40 CFR Part 763 -

Asbestos. requirments)

Laboratory: EMLab P&K, LLC – ID#: 3593696

9445 Farnham St, Suite 103, San Diego, CA 92123

(866) 888-6653 Fax (623) 780-7695 www.emlab.com

Laboratory Sample Analysis Method: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA

METHOD 600/R-93-116, SOP EM-AS-S-1267)

Sampling Protocols: EPA 40CFR 763.86 Methods

SITE/BUILDING DESCRIPTION

Structure Type: Commercial Facility

Year Built: Unknown

Date of known additions: Unknown

Building Structural Damage (If Any): None Observed

Approximate Square Feet of Surveyed Area: 2,500

Structure Frame: Wood

If other, describe: None

Structure Foundation: Wood (Elevated)

If other, describe: None

Number of Floors: 1

Building Occupied: No

SUSPECT MATERIALS OBSERVED

Suspect Materials Observed During the Asbestos Survey Conducted

- Yellow Fiberglass Insulation
- Pink HVAC Fiberglass Insulation w/ Wrap
- 2'x4' Fissured Ceiling Tile
- Sprayed on Acoustic Ceiling Material
- Unfinished Drywall
- 2'x4' Textured Ceiling Tile
- Blue Sheet Vinyl
- Cove Base Glue
- Tan Sheet Vinyl
- Finished Drywall
- 12'x12' Tan Vinyl Floor Tile
- Concrete Sidewalk and Asphalt

Inaccessible Materials Presumed to be Asbestos Content:

- Sherrif's Office
- Roofing Materials

SECTION 2 INVESTIGATION LIMITATIONS & WARRANTY

Per the agreement between The Client and MTGL, Inc., the scope of services was performed as described in this report.

The intent of this survey is to pre-determine the presence of EPA/OSHA regulated asbestos containing building materials that may need to be addressed prior to scheduled demolition and/or renovation activities.

INVESTIGATION LIMITATIONS

MTGL, Inc. did not conduct testing within interstitial wall cavities, ceiling plenums, HVAC ventilation systems or crawlspaces or other locations of the facility, outside of the Client specified areas.

The findings of this report are valid as of the date of the survey and sample collection. Changes in the condition of the property can occur with passage of time, whether they are due to natural processes or the works of man on this or adjacent properties. In addition, changes in the state-of-art technology and/or government codes may occur. Due to such changes, the findings of this report may be invalidated wholly or in part by conditions beyond our control. Due to changes that can occur over time, submittals of this report to Regulatory Agencies may require additional site visits and assessment to document current conditions.

The final assessment of the potential for the existence of hazardous contaminants at the site should be considered a professional opinion based on the data obtained during the investigation and should not be considered a definitive statement that a hazardous contaminant or conditions are, or is not, present in the area of study. These opinions have been derived in accordance with current standards of practice.

This report is intended solely for use by the parties to whom it is addressed. This report is not intended for and may not contain sufficient information for purposes other than qualitative evaluation of asbestos or conditions at the time of our evaluation. Reliance on this report for other purposes or by other parties shall be at the user's sole risk.

WARRANTY

MTGL, Inc. warrants that the findings contained herein have been prepared with the level of care and skill exercised by experienced and knowledgeable environmental consultants who are appropriately licensed or otherwise trained to perform asbestos inspections and assessments pursuant to the scope of work required on this project. MTGL's Asbestos Survey Reports are prepared by trained certified professionals without a conflict of interest in the demolition(s) or renovation project(s) as per the Business and Professions Code 7180 (BP7180).

MTGL, Inc. warrants that the findings contained herein have been prepared in general accordance with accepted professional practices as applied by similar professionals in the community at the time of its preparation. Changes in the state of the art or in applicable regulations cannot be anticipated and have not been addressed in this report.

The survey included inspection of visible and accessible materials. MTGL did not inspect or sample inaccessible areas and did not dismantle any part of the structure to survey inaccessible areas. For the purpose of this warranty, inaccessible is defined as areas that could not be tested (sampled) without destruction of the structure or a portion of the structure. Inaccessible materials that are visible to MTGL's inspectors shall be assumed to be asbestos containing. No other warranty is expressed, or implied.

SECTION 3 ASBESTOS SURVEY METHODOLOGY

GENERAL REFERENCES

The asbestos survey consisted of two major activities: visual inspection and sampling. Although these activities are listed separately, they are integrated tasks.

VISUAL INSPECTION

The visual inspection was performed by an AHERA Certified Building Inspector under the direction of a California Certified Asbestos Consultant. An initial building walkthrough was conducted to determine the presence of suspect materials that were accessible or exposed. Materials that were similar in general appearance were grouped into homogeneous sampling areas.

HOMOGENEOUS MATERIAL CLASSIFICATIONS

A preliminary walkthrough of the building was conducted to determine areas of materials that were visually similar in color, texture, and general appearance and that appeared to have been installed at the same time. Such materials are termed "homogeneous materials" by the EPA. During this walkthrough, the approximate locations of these homogeneous materials were noted. Only materials that were accessible or exposed and suspected to contain asbestos were identified.

Following the EPA protocols, each identified suspect homogeneous material is placed in one of the following EPA classifications:

- Surfacing Materials (spray or trowel applied materials)
- Thermal System Insulation (materials applied to various mechanical systems)
- Miscellaneous Materials (any material which do not fit either of the above categories, such as floor tiles, etc.)

SAMPLING PROCEDURES

Following the walkthrough, the inspector collected selected samples of exposed or accessible materials identified as suspect material. Sampling was limited to accessible materials not involving destruction of walls, other building elements, physical barriers, or the structural integrity of the item being tested.

EPA guidelines were used to determine the sampling protocol. Sampling locations that were chosen to be representative of the homogeneous sampling area. While an effort was made to collect samples randomly, samples were taken preferentially from damaged areas or areas which were the least visible to minimize disturbance of the material.

Samples of surfacing material were collected in general accordance with the EPA random sampling protocol outlined in the EPA publication, "Asbestos in Buildings: Simplified Sampling Scheme for Friable Surfacing Materials" (EPA 560/5-85-030a, October 1985).

Samples of miscellaneous materials were also taken as randomly as possible, while attempting to sample already damaged areas so as to minimize disturbance of the material.

A minimum of three samples were collected of each homogeneous material. Depending on the quantity of homogeneous material, additional samples may be collected to avoid the possibility of false negative results.

LABORATORY PROCEDURES

Method of Analysis

Analysis was performed by visually observing the bulk sample and preparing slides for microscopic examination and identification. The samples were mounted on slides and then analyzed for asbestos (chrysotile, amosite, crocidolite, anthophyllite, and actinolite/tremolite), fibrous non-asbestos constituents (mineral wool, paper, etc.) and nonfibrous constituents. Asbestos was identified by refractive indices, morphology, color, pleochroism, birefringence, extinction characteristics, and signs of elongation. The same characteristics were used to identify the non-asbestos constituents.

The microscopist used a stereoscope to visually estimate relative amounts of each constituent using a stereoscope to determine the volume of each constituent in proportion to the total volume of the sample.

All bulk samples were analyzed by Polarized Light Microscopy (PLM) with dispersion staining as described by the Interim Method of the Determination of Asbestos in Bulk Insulation, Federal Register, 40 CFR Ch. 1 Pt. 763, App. A to Subpart. F, July 1, 1987. This is a standard method of analysis in optical mineralogy and the currently accepted method for the determination of asbestos in bulk samples. A suspect material is immersed in a solution of known refractive index and subjected to illumination by polarized light. The characteristic color displays that result enable mineral identification. It should be noted that some ACM may not be accurately identified or quantified by PLM. As an example, the original fabrication of vinyl floor tiles routinely involved milling of asbestos fibers to extremely small sizes. As a result, these fibers may go undetected under the standard polarized light microscopy method. Transmission Electron Microscopy (TEM) is recommended for a more definitive analysis of these materials. MTGL, Inc. has no control over how the laboratory describes materials or layers of materials being analyzed. Although a minimum of three samples are collected of suspect building materials, first positive stops may be requested of the laboratory and the results of the one positive sample will be reported. All other homogeneous materials will be assumed to be positive for asbestos content.

Laboratory Quality Control Program

MTGL, Inc. only uses laboratories that maintain an in-house quality control program. This program involves blind reanalysis of ten percent of all samples, precision and accuracy controls, and use of standard bulk reference materials.

SECTION 4 ASBESTOS OBSERVATIONS AND FINDINGS

SUMMARY

Table 1: Positively Identified Materials that Contain Asbestos (ACM and ACCM) and Assessment of Material Condition (as of the date the survey was conducted). Laboratory Results can be found in Appendix 1.

Material* Description	Location*	Sample #	Approximate Quantity**	AHERA Rank***	Friability/ Material Type	Damage Category	Quantity of Contamination (If any) **	Asbestos Content
Roofing Material	Roof		3,000		Inaccessible		Inaccessible	Assumed

Note: The roof was inaccessible at the time of the inspection due to the absence of ladder access. Roofing materials are assumed to contain asbestos until further testing can be determined otherwise.

Note: The Sheriff's office was locked at the time of the inspection. In the event suspect asbestos containing materials are discovered during demolition that are not identified in this report, disturbance of the materials should be stopped until further assessment of the material for asbestos content can be conducted.

*Positively identified ACM and ACCM that are similar in color and texture in other locations throughout the structure and facility shall be considered as asbestos containing until further sampling/analysis determines otherwise. In the event suspect asbestos containing materials are discovered during maintenance, renovation and/or demolition that are not identified in this report, disturbance of the materials should be stopped until further assessment of the material for asbestos content can be conducted.

**MTGL, Inc. is not responsible for actual quantity of the material(s). MTGL recommends bidding contractors measure and calculate quantities for estimated abatement costs and notifications. (sf= square foot; NA= not applicable))

***Each homogeneous area of friable and non-friable asbestos-containing material (ACM) was classified into one of the following seven categories, as specified in EPA's AHERA regulations (40 CFR 763.88):

- (1) Damaged or significantly damaged thermal system insulation ACM.
- (2) Damaged friable surfacing ACM.
- (3) Significantly damaged friable surfacing ACM.
- (4) Damaged or significantly damaged friable miscellaneous ACM.
- (5) ACBM with potential for damage.
- (6) ACBM with potential for significant damage.
- (7) Any remaining friable ACBM or friable suspected ACBM.
- (X) Not applicable (material is non-friable surfacing or miscellaneous material).

The damage categories are defined as follows:

Category 1 - "Undamaged" means the material had no visible damage, or extremely minor damage or surface marring (i.e., a room full of floor tile with only two or three small corners chipped off on the tile).

Category 2 - "Damaged" means the material had visible damage evenly distributed over less than 10% of its surface, or localized over less than 25% of its surface.

Category 3 - "Significantly Damaged" means the material had visible damage that is evenly distributed over 10% or more of its surface, or localized over 25% or more if its surface.

Table 2: Materials found to be Negative for Asbestos (as of the date the survey was conducted). Laboratory results can be found in Appendix 1.

Material* Description	Sample #
Fiberglass insulation	1,2,3
Fiberglass insulation w/ wrap and tape	4,5,6
Fissured ceiling tile	7,8,9
Sprayed on Acoustic ceiling	10,11,12
Unfinished drywall	13,14,15
Fiberglass textured ceiling tile	16,17,18
Blue sheet vinyl	19,21
Cove base adhesive	22,23,24
Tan sheet vinyl	25,26,27
Finished drywall	28,29,30
12"x12" Tan vinyl tile floor	31,32,33
Concrete sidewalk	34,35,36
Asphalt	37,38,39

GENERAL INFORMATION

Environmental Protection Agency (EPA)

According to the San Diego County Air Pollution Control District (APCD) Rule 1206 Section (h)(1)(i), composite analysis is not allowed on joint compound used as a skim coat for texturing and shall be treated as a separate material.

These materials are eligible for analyzed using 1,000 Point Count with Gravimetric Reduction methods. Analysis would be conducted per strata and materials found to be greater than 0.1% asbestos are regulated by OSHA and handled as asbestos containing until packaged and stored for disposal. Materials greater than 1% are regulated by EPA/APCD and would require disposal as asbestos containing material.

A material is considered by the EPA and the State of California to be asbestos-containing if at least one sample collected from the area shows asbestos present in an amount greater than one percent (>1%).

California Occupational Safety & Health Agency (Cal/OSHA)

Title 8, California Code of Regulation 1529 defines asbestos-containing construction materials as materials containing greater than one-tenth of one percent (0.1%) asbestos by weight. Under this code, materials containing between 0.1% and 1% asbestos are regulated as other regulated operations. Although operations involving materials containing between 0.1% and 1% asbestos are not considered Class I, II, or III work, several sections of the standard are applicable, including negative exposure assessments and the use of regulated areas.

Laboratory analysis may report materials as "Trace Asbestos". These materials are assumed to be greater than 0.1%. Upon client request, these materials can be analyzed using 1,000 Point Count with Gravimetric Reduction methods. Materials found to be greater than 0.1% asbestos are regulated by OSHA and handled as asbestos containing until packaged and stored for disposal.

Please refer to the laboratory analysis for a more detailed description of the microscopic analysis of these samples.

Asbestos-containing materials (ACM) are regulated by federal, state, and local agencies, which include but may not be limited to the following:

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) requires an inspection for asbestos be done on facilities that are to undergo demolition or renovation work. Materials found to contain asbestos may need to be removed prior to the start of such demolition/renovation work.

NESHAP defines Category I non-friable asbestos-containing materials as gaskets, resilient floor covering, and asphalt roofing products that contain more than one percent asbestos, and Category II non-friable as any materials, except for Category I non-friable, that contain more than one percent asbestos and cannot be reduced to a powder by hand pressure when dry. NESHAP defines a Regulated Asbestos-Containing Material (RACM) as: (a) friable ACM, (b) Category I non-friable that has become friable, (c) Category I non-friable that has or may be subject to sanding, grinding, cutting, or abrading, and (d) Category II non-friable that may or has become friable during demolition or renovation.

SECTION 5 CONCLUSIONS & RECOMMENDATIONS

CONCLUSIONS

On this limited asbestos survey, materials observed and tested for asbestos were negative for asbestos content.

The roof was inaccessible at the time of the inspection. Roofing materials are assumed to contain asbestos until further testing can be determined otherwise.

The Sheriff's office was locked at the time of the inspection. In the event suspect asbestos containing materials are discovered during maintenance, renovation and/or demolition that are not identified in this report, disturbance of the materials should be stopped until further assessment of the material for asbestos content can be conducted.

RECOMMENDATIONS

If during renovation activities, materials other than the ones discussed in this report are observed, the materials should be tested for asbestos content prior to disturbance.

General

MTGL recommends that all asbestos containing materials be removed prior to any renovation and/or demolition activities, which may impact the materials. A Licensed Abatement Contractor in the State of California should perform the removal activities.

Removal of ACM/ACCM should be conducted in accordance with EPA and OSHA requirements for Federal, State and Local rules and regulations. All asbestos removal should be conducted using wet methods and engineering controls to reduce airborne fiber concentrations. OSHA required personal protective equipment must be used for worker protection.

All activities that may disturb or disrupt asbestos containing material must be conducted in properly demarcated regulated areas using wet removal methods.

Proper decontamination methods must be used by all workers entering and leaving regulated work areas where asbestos containing materials are being removed.

In the event ACM or ACCM materials are observed to be damaged and/or visible contamination is present, isolate the immediate area, turn off HVAC systems. Only properly trained and certified workers may enter the work area to conducted clean-up activities using wet methods.

If renovation and/or demolition activities do not impact the asbestos containing materials, then the materials can be managed in place. Periodic surveillance is recommended. An Operations & Maintenance (O&M) program should be established and conducted by properly trained personnel. Minimum training for each type of material that has been identified should be given as required by Cal/OSHA. Additionally, postings would be required in all publicly accessible areas warning of the potential hazard to satisfy the Proposition 65 & Hazard Communication regulations.

SECTION 6 APPENDICES

APPENDIX 1 ASBESTOS LABORATORY RESULTS & CHAIN OF CUSTODY



Report for:

Mr. Carl Tucker MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126

Eurofins EPK Built Environment Testing, LLC Project: Vanir Const. - OC Juvenile Hall; 331 The City of Orange B1 Regarding:

EMĹ ID: 3593696

Approved by:

Dates of Analysis:

Asbestos PLM: 04-03-2024 and 04-04-2024

EMLab ID: 3593696, Page 1 of 11

Approved Signatory Carlos Rivadeneyra

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267) NVLAP Lab Code 500034-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Date of Sampling: 04-01-2024 Date of Receipt: 04-01-2024 Date of Report: 04-04-2024

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of Orange B1

ASBESTOS PLM REPORT

Total Samples Submitted: 39 **Total Samples Analyzed:** 38 **Total Samples with Layer Asbestos Content > 1%:** 0

Lab ID-Version 1: 17574430-1

Lab ID-Version 1: 17574431-1

Lab ID-Version 1: 17574432-1

Lab ID-Version : 17574433-1

EMLab ID: 3593696, Page 2 of 11

Location: 1. Fiberglass Insulation

Sample Layers	Asbestos Content
Yellow Insulation	ND
Composite Non-Asbestos Content:	99% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 2. Fiberglass Insulation

	•
Sample Layers	Asbestos Content
Yellow Insulation	ND
Composite Non-Asbestos Content:	99% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 3, Fiberglass Insulation

Sample Layers	Asbestos Content
Yellow Insulation	ND
Composite Non-Asbestos Content:	99% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 4, Fiberglass Ins w/Wrap and Tape

Sample Layers	Asbestos Content
Silver Wrap	ND
Tan Adhesive	ND
Gray Tape	ND
Pink Insulation	ND
Composite Non-Asbestos Content:	70% Glass Fibers 10% Cellulose
Sample Composite Homogeneity:	Poor

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

Lab ID-Version‡: 17574434-1

Lab ID-Version 1: 17574436-1

Lab ID-Version 1: 17574437-1

EMLab ID: 3593696, Page 3 of 11

9445 Farnham Street, Suite 103, San Diego, CA 92123 (800) 651-4802 www.eurofinsus.com/Built

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B1

Date of Sampling: 04-01-2024 Date of Receipt: 04-01-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 5, Fiberglass Ins w/Wrap and Tape

Sample Layers	Asbestos Content
Silver Wrap	ND
Tan Adhesive	ND
Gray Tape	ND
Pink Insulation	ND
Composite Non-Asbestos Content:	70% Glass Fibers
	10% Cellulose
Sample Composite Homogeneity:	Poor

Location: 6, Fiberglass Ins w/Wrap and Tape

Lab ID-Version 1: 17574435-1 Sample Layers **Asbestos Content** Silver Wrap ND Tan Adhesive ND Gray Tape ND Pink Insulation ND **Composite Non-Asbestos Content:** 70% Glass Fibers 10% Cellulose **Sample Composite Homogeneity:** Poor

Location: 7, Fissured Ceiling

Sample Layers	Asbestos Content
Gray Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	
	20% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 8, Fissured Ceiling

Sample Layers	Asbestos Content
Gray Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	60% Cellulose
_	20% Glass Fibers
Sample Composite Homogeneity:	Good

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

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Lab ID-Version : 17574440-1

EMLab ID: 3593696, Page 4 of 11

Client: MTGL, Inc. C/O: Mr. Carl Tucker Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B1

Date of Sampling: 04-01-2024 Date of Receipt: 04-01-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 9, Fissured Ceiling

Location: 9, Fissured Ceiling	Lab ID-Version‡: 17574438-1
Sample Layers	Asbestos Content
Gray Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	60% Cellulose
-	20% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 10. Sprayed on Acoustic Ceiling

Location: 10, Sprayed on Acoustic Ceiling	Lab ID-Version‡: 17574439-1
Sample Layers	Asbestos Content
White Acoustic Ceiling Material	ND
Sample Composite Homogeneity:	Good

Location: 11. Sprayed on Acoustic Ceiling

Sample Layers	Asbestos Content
White Acoustic Ceiling Material	ND
Sample Composite Homogeneity:	Good

Location: 12, Sprayed on Acoustic Ceiling	Lab ID-Version‡: 17574441-1
Sample Layers	Asbestos Content
White Acoustic Ceiling Material	ND
Sample Composite Homogeneity:	Good

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

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Lab ID-Version‡: 17574442-1

Lab ID-Version‡: 17574443-1

EMLab ID: 3593696, Page 5 of 11

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B1

Date of Sampling: 04-01-2024 Date of Receipt: 04-01-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 13, Unfinished Drywall

Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	10% Cellulose
_	< 1% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 14, Unfinished Drywall

Sample Layers	Asbestos Content
White Joint Compound	ND
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	10% Cellulose < 1% Glass Fibers
Sample Composite Homogeneity:	

Location: 15. Unfinished Drywall

Location: 15, Unfinished Drywall	Lab ID-Version‡: 17574444-1
Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	10% Cellulose
•	< 1% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 16, Textured Ceiling Tile	Lab ID-Version‡: 17574445-1
Sample Layers	Asbestos Content
Yellow Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	85% Glass Fibers
Sample Composite Homogeneity:	Moderate

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

9445 Farnham Street, Suite 103, San Diego, CA 92123

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Lab ID-Version‡: 17574446-1

Lab ID-Version 1: 17574450-1

EMLab ID: 3593696, Page 6 of 11

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B1

Date of Sampling: 04-01-2024 Date of Receipt: 04-01-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 17, Textured Ceiling Tile

, 8	•
Sample Layers	Asbestos Content
Yellow Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	85% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 18, Textured Ceiling Tile	Lab ID-Version‡: 17574447-1
Sample Layers	Asbestos Content
Yellow Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	85% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 19. Blue Sheet Vinvl

Location: 19, Blue Sheet Vinyl	Lab ID-Version‡: 17574448-1
Sample Layers	Asbestos Content
Blue Sheet Flooring	ND
Yellow Mastic	ND
Sample Composite Homogeneity:	Moderate

Location: 21, Blue Sheet Vinyl

Sample Layers	Asbestos Content
Blue Sheet Flooring	ND
Yellow Mastic	ND
Sample Composite Homogeneity:	Moderate

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

EMLab ID: 3593696, Page 7 of 11

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B1

Date of Sampling: 04-01-2024 Date of Receipt: 04-01-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 22, Cove Base Glue Lab ID-Version : 17574451-1

Sample Layers	Asbestos Content
Beige Glue	ND
Sample Composite Homogeneity:	Good

Location: 23, Cove Base Glue Lab ID-Version 1: 17574452-1

Sample Layers	Asbestos Content
Beige Glue	ND
Sample Composite Homogeneity:	Good

Location: 24, Cove Base Glue Lab ID-Version 1: 17574453-1

Sample Layers	Asbestos Content
Beige Glue	ND
Sample Composite Homogeneity:	Good

Location: 25, Tan Sheet Vinyl Lab ID-Version : 17574454-1

Sample Layers	Asbestos Content
Tan Sheet Flooring with Fibrous Backing	ND
Tan Mastic	ND
Composite Non-Asbestos Content:	15% Cellulose 2% Synthetic Fibers < 1% Glass Fibers
Sample Composite Homogeneity:	Moderate

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9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Lab ID-Version‡: 17574455-1

Lab ID-Version 1: 17574456-1

Lab ID-Version : 17574457-1

Lab ID-Version : 17574458-1

EMLab ID: 3593696, Page 8 of 11

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B1

Date of Sampling: 04-01-2024 Date of Receipt: 04-01-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 26, Tan Sheet Vinyl

Sample Layers	Asbestos Content
Tan Sheet Flooring with Fibrous Backing	ND
Tan Mastic	ND
Composite Non-Asbestos Content:	15% Cellulose
	2% Synthetic Fibers
	< 1% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 27. Tan Sheet Vinvl

	·
Sample Layers	Asbestos Content
Tan Sheet Flooring with Fibrous Backing	ND
Tan Mastic	ND
Composite Non-Asbestos Content:	15% Cellulose
	2% Synthetic Fibers
	< 1% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 28, Finished Drywall

, , , , , , , , , , , , , , , , , , ,	•
Sample Layers	Asbestos Content
White Paint	ND
White Joint Compound	ND
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

Location: 29, Finished Drywall

Sample Layers	Asbestos Content
White Paint	ND
White Joint Compound	ND
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

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9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Lab ID-Version‡: 17574459-1

Lab ID-Version 1: 17574462-1

EMLab ID: 3593696, Page 9 of 11

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B1

Date of Sampling: 04-01-2024 Date of Receipt: 04-01-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 30, Finished Drywall

Sample Layers	Asbestos Content
White Paint	ND
White Joint Compound (Trace)	ND
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content: 10% Cellulose	
Sample Composite Homogeneity:	Poor

Location: 31, 12"x12" Tan Vinvl Floor Tile

Location: 31, 12"x12" Tan Vinyl Floor Tile	Lab ID-Version‡: 17574460-1
Sample Layers	Asbestos Content
Tan Floor Tile	ND
Tan Mastic	ND
Sample Composite Homogeneity: Moderate	

Location: 32, 12"x12" Tan Vinvl Floor Tile

Location: 32, 12"x12" Tan Vinyl Floor Tile	Lab ID-Version‡: 17574461-1
Sample Layers	Asbestos Content
Tan Floor Tile	ND
Tan Mastic	ND
Sample Composite Homogeneit	y: Moderate

Location: 33, 12"x12" Tan Vinyl Floor Tile

======================================	
Sample Layers	Asbestos Content
Tan Floor Tile	ND
Tan Mastic	ND
Sample Composite Homogeneity: Moderate	

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(800) 651-4802 www.eurofinsus.com/Built

Lab ID-Version : 17574465-1

Client: MTGL, Inc. C/O: Mr. Carl Tucker Date of Sampling: 04-01-2024 Re: Vanir Const. - OC Juvenile Hall; 331 The City of Date of Receipt: 04-01-2024 Date of Report: 04-04-2024

Orange B1

ASBESTOS PLM REPORT

Location: 34, Concrete Sidewalk Lab ID-Version : 17574463-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 35, Concrete Sidewalk	Lab ID-Version‡: 17574464-1
Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 36, Concrete Sidewalk

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 37, Asphalt Lab ID-Version‡: 17574466-1

Sample Layers	Asbestos Content
Black Asphalt	ND
Sample Composite Homogeneity:	Good

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

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C/O: Mr. Carl Tucker Date of Sampling: 04-01-2024 Re: Vanir Const. - OC Juvenile Hall; 331 The City of Date of Receipt: 04-01-2024 Orange B1 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Client: MTGL, Inc.

Location: 38, Asphalt Lab ID-Version : 17574467-1

Sample Layers	Asbestos Content							
Black Asphalt	ND							
Sample Composite Homogeneity:	Good							

Location: 39, Asphalt Lab ID-Version 1: 17574468-1

Sample Layers	Asbestos Content							
Black Asphalt	ND							
Sample Composite Homogeneity:	Good							

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CHAIN OF CUSTODY 🔆 eurofins

CP - Contact Plate

ST - Spore Trap

B - Bulk

T - Tape

SW - Swab

so - Soil

www.eurofinsus.com/Built

East: (866) 871-1984

BC - BioCassette

A1S - Andersen

SAS - Surface Air Sampler

Built Environment Testing

Fog Rain Snow Wirid Clear WEATHER None Light Moderate Heavy

Spore

Non-Culturable Tape, Swa

Swab, Bulk Trap Central: (800) 651-4802 West: (866) 888-6653 CONTACT INFORMATION MTGL, Inc. Company: CARLTUCKU Contact: 619-454-7851 Phone TURN AROUND TIME CODES - (TAT) PROJECT INFORMATION Rushes received after 2pm Vanir Coust - OC Juvenile Hall STD - Standard (Default) or on weekends, will be Project ID: ND - Next Business Day 331 The City of Grange Bldg considered received the Project next business day. Please Description: SD - Same Business Day Project alert us in advance of Date/Time: Zip Code: weekend analysis needs WH - Weekend/Holiday/ASAP Sampled 5DPE-24-061.1CT BY PO Number Total Sample NOTES TAT Volume/Area (Time of day, Temp, RH, etc.) Type DESCRIPTION (Above) SAMPLE ID (as applicable) (Below Fiberglass insulation PINK HVAC 0 12 3 RECEIVED BY DATE & TIME RELINQUISHED BY SAMPLE TYPE CODES Darla Beery O - Other:

4/1/24

	CHAIN OF CUSTODY & eurofins www.eurofinsus.com/Built East: (866) 871-1984 Central: (800) 651-4802 West: (866) 888-6653	None Non-Culturable	
	CO	INTACT INFORMATION	
	Contact CARLTUCKEL	Addiess 7742 Arjons DR., San Diego A Special instructions	
	Project 1D Project 1D Project 1D Project 1D Project 1D Project Description Project 2p Code 92868 Date Title Sampled Sa	TURN AROUND TIME CODES - (TAT) STD Standard (Delault) Hushes received after 20m or on weekends will be considered received the next business Day SD Same Business Day Wild Weekends Standard or weekends with the salous control of the salous of the sal	Figure Ad lines specify (est)
	SAMPLE ID DESCRIPTION	Sample TAT Total NOTES Type (Above) (Above) (as applicable (Time of day, Temp, RH, etcl.)	I (vec (Pb.)
-	19 Blue Sheet Vings		
	23		
-	25 Tan Shoet Vinyl		4
1	028 Finshed Dyred		
	SAMPLE TYPE CODES	RELINQUISHED BY DATE & T ME RECEIVED BY DAT	TE & TIME
	BC - Bi Cassette CP Contact Plate T - Table A1S - Andersen ST - Spore Trap SW Switch SAS Surface Air Sampler B Bulk SO - Soil NP - Non-potable Water P - Potable Water D - Oust	RELINGUISHED BY O. Other D. La. 15 cery 4/1/24	550

CHAIN OF CUSTO	DDY 🔆 eurofins			WEATHER	Fog Rain	Sn:w Wind Clear		_					I DE ROLL DAT	nin ni ika	ord dia	Luun fee	1000 10040
www.eurotinsus.coกบBuilt	t Aut E	nvironment	r lestin				Mar	داد څي	urable		REQUE						
ast: (866) 871-1984 entral: (800) 651-4802 Vest; (866) 888-6653				Light Moderate Heavy	1_1		Spor Trap	T	Tiafae ab, Bu	Bo	Casset iti, Wa	le (003	593	69	6	
	CONTACT	INFORMATIO	ON								Bacterta)				100		
ontact Call To	acpec	siess, 77 ocial Instructi	42 F	triens Dr.	San Di	9192126				(olds ob	and Surface				Count (NIOSH 7400)		
	ROJECT INFORMATION			TURN AROUND TO	ME CODES	(TAT)	100	dive)	E SE	, ķ	A 45.	4	2		100		
roject 19: Vanir roject lesconpilon: 331 T (roject lip Ccde: 92868	S-molerd	3-1 N -24si	D - Next	kdard (Default) Business Day : Business Day kend#folklay/ASAP	or on we consider next basin alert us	ceived after 2pm ekends, will be ad received the less day, Please in advance of analysis needs.		Direct Microscoppic Exam (Qualitative)	Quantitative spore count direct examination	Surface Funcy (Genus ID + Asp	Culturable Air Fungi (Genus 10 + Asp. Gram. Stam and Counts (Culturable Air	Legionalia culture	Quantifinay-Scwage Screen	OTHER (pleaser specify less)	Asbestos in Air - POM Arthorne Fiber	Lead (Pt.) - Flame AA	PCR (de ser specify test) Allergens (please specify test)
SAMPLE ID	DESCRIPTION	IVDA	TAT Abov _b)	Total Volume/Area (as applicable)		TES Temp, RH, etc.)	Spore Ti	Direct IM	Ouanifiative Deci Orace	i-Media	Culturate Gram St	Legioners	Cuant Tr	OTHER	Asheutos	Lead (Pr	PCR (de a
	"Y12" Tan Ving thought herete scalewall phalt		STD	~ Isqin													
	SAMPLE TYPE CODES			RELINQUISHED		DATE & TIME		-	R	ECEI	VED 8	Y		T	DA	TE 8	TIME
BC - BioCassette ** A15 - Andersen GAS - Surface Air Samplet NP - Non-potable Water	CP - Contact Plate T - Tape O ST - Spore Trap SW - Swab B - Bulk SO - Soil P - Potable (Water) D - Dust	• Other:	Da) J. B.	ery	4/1/24				C	2			1	7	5-5	12

United States Department of Commerce National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 500034-0

Eurofins EMLab P&K

San Diego, CA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2024-01-01 through 2024-12-31

Effective Dates



For the National Voluntary Laboratory Accreditation Program



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Eurofins EMLab P&K

9445 Farnham St #103 San Diego, CA 92123 Quynh Nguyen Phone: 800-651-4802

Email: quynh.nguyen@et.eurofinsus.com https://www.eurofinsus.com/environment-testing/

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 500034-0

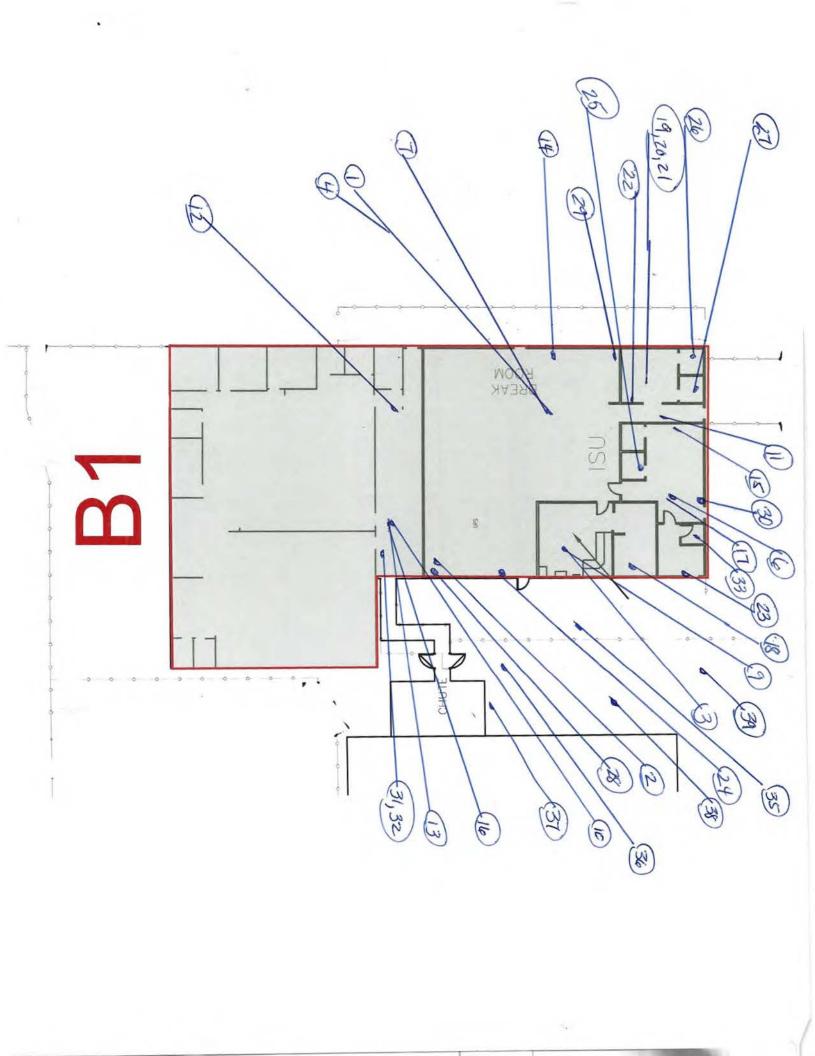
Bulk Asbestos Analysis

<u>Code</u>	<u>Description</u>
18/A01	EPA 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

For the National Voluntary Laboratory Accreditation Program

APPENDIX 2

SAMPLE LOCATION MAP (NOT TO SCALE)



APPENDIX 3 PHOTO DOCUMENTATION



1. Fiberglass insulation and fissured ceiling tile.



2. Fiberglass insulation w/wrap and tape.



3. Sprayed on acoustic ceiling.



4. Unfinished drywall.



5. Blue sheet vinyl.



6. Tan sheet vinyl.



7. Finished drywall.



8. 12"x12" Tan vinyl floor tile.



9. Asphalt.



10. Concrete sidewalk.

APPENDIX 4 INSPECTOR CERTIFICATIONS

California Certified Asbestos Consultant (CAC)

Card Holder: <u>Michelle Ehresman</u>

Certification Number: <u>14-5323</u> Exp.: <u>11/19/2024</u>

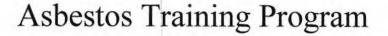
Current Employer: MTGL, Inc.

Supporting Certifications:

AHERA Contractor/Supervisor Refresher Certification
 AHERA Building Inspector Refresher Certification
 AHERA Management Planner Refresher Certification
 AHERA Project Designer Refresher Certification
 Exp. 7/27/2024
 Exp. 7/27/2024
 Exp. 8/16/2024



MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126 858-537-3999



This is to certify

Michelle Ehresman 1656

Has successfully completed 8 hours of formal training required by section 206 of TSCA II entitled

Contractor/Supervisor Refresher

Presented By **Environmental Compliance Training** PO BOX 16555 San Diego, CA. 92176-6555

(858) 558-7465

Director:

Walter T. Amenta, CIH, Approval Number CA-029-04

Class Dates:

06-24-2023

Exam Date:

n/a

Expiration Date: 06-24-2024

Certification Number: 0623ABCA167303

Certificate Of Completion

Asbestos Building Inspector Refresher Course

DOSH #: CA-015-06

Michelle Ehresman

ABIR0727230010N35227

David Wallach

Principal Instructor

7/27/2023

Course Start Date

7/27/2023

Course End Date

Michael W. Horner

Training Director

7/27/2023 Exam Date 7/27/2024

Expiration Date

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



NATEC International, Inc.

National Association of Training and Environmental Consulting



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Important Industry Contacts

CAL-OSHA:

Ph# (916) 574-2993

(916) 483-0572 Fax Notification Web: www.dir.ca.gov or calosha.com

CDPH/CLPPB:Ph# (510) 620-5600

Web: www.cdph.ca.gov/programs/CLPPB

SCAQMD:

Ph# (909) 396-3739

Fax#(909) 396-3342

BAAOMD:

Ph# (415) 749-4762

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National Association of Training and Environmental Consulting

This Card Acknowledges That Michelle Ehresman

Holds Training Certification For Asbestos Building Inspector Refresher Course

Expiration: 7/27/2024

ABIR0727230010N35227

Michael W. Horner Training Director

Certificate Of Completion

Asbestos Project Designer Refresher Course

DOSH #:CA-015-10

Michelle Ehresman

APDR0816230004N35415

Norm Kramer

Principal Instructor

8/16/2023 Course Start Date 8/16/2023

Course End Date

8/16/2023

Exam Date

Michael W. Horner

Training Director

8/16/2024

Expiration Date

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



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(916) 483-0572 Fax Notification

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SCAQMD:

Ph# (909) 396-3739 Fax#(909) 396-3342

BAAQMD:

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National Association of Training and Environmental Consulting
*Note: Card is not suitable substitute for certificate and is not accepted by SCAQMD as proof of
certification
This Card Askinguidades That

This Card Acknowledges That Michelle Ehresman

Holds Training Certification For Asbestos Project Designer Refresher Course

Expiration: 8/16/2024

Training Date 8/16/2023 APDR0816230004N35415

Michael W. Horner Training Director

Certificate Of Completion

Asbestos Management Planner Refresher Course

DOSH #:CA-015-08

Michelle Ehresman

AMPR0727230007N35357

David Wallach

Principal Instructor

7/27/2023

Course Start Date

7/27/2023

Course End Date

7/27/2023

Exam Date

Training Director

Michael W. Horner

7/27/2024 **Expiration Date**

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



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SCAQMD:

Ph# (909) 396-3739 Fax#(909) 396-3342

BAAQMD:

Ph# (415) 749-4762

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This Card Acknowledges That Michelle Ehresman

Holds Training Certification For Asbestos Management Planner Refresher Course

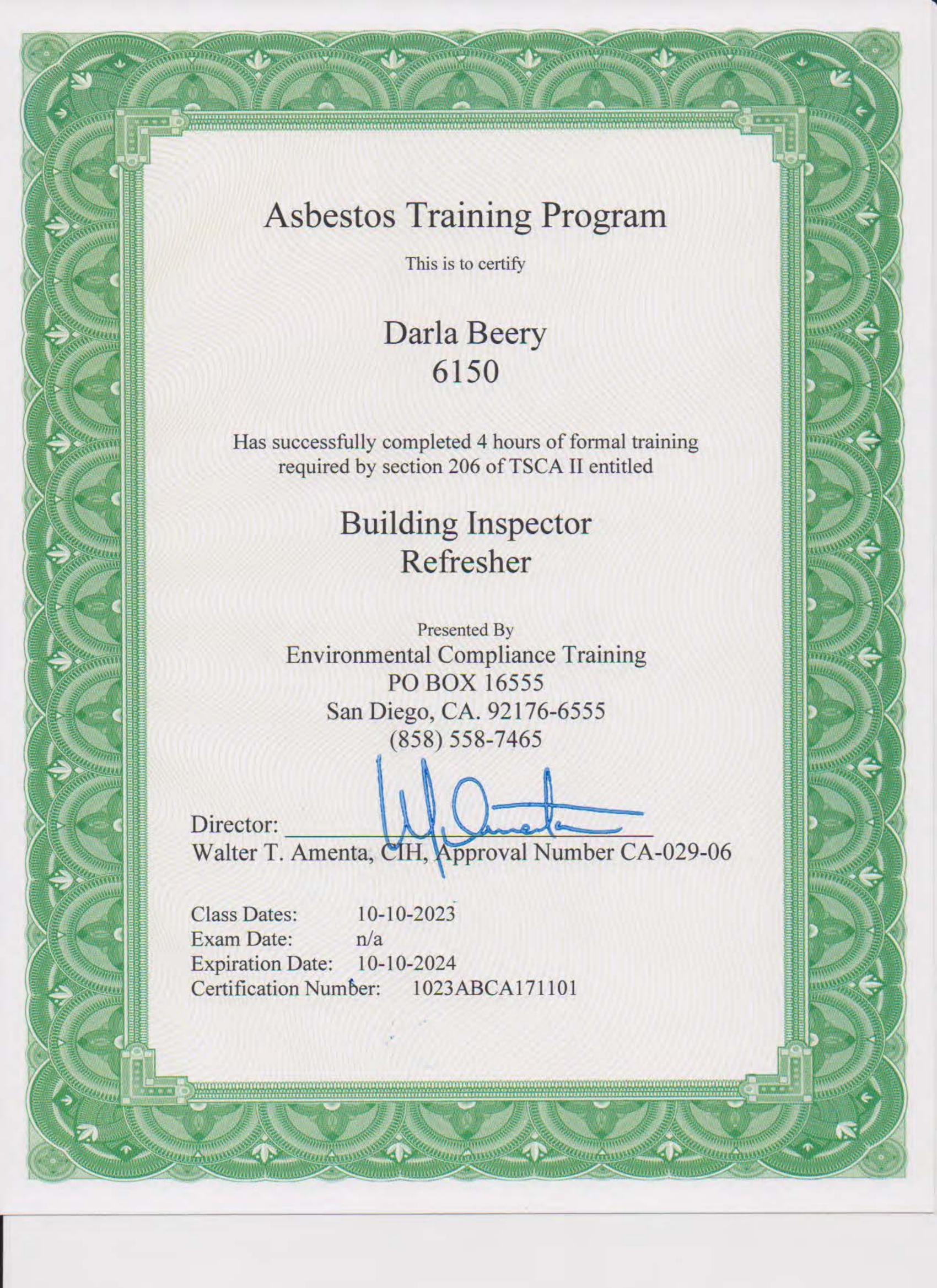
Expiration: 7/27/2024

7/27/2023 Training Date AMPR0727230007N35357

Certificate No.

Michael W. Homer Training Director

Darla Beery AHERA Building Inspector Certification



LEAD-BASED PAINT INSPECTION REPORT

Juvenile Hall-Building 1 331 The City Drive, S Orange, California 92868

Prepared for:

Vanir Construction 4540 Duckhorn Drive, Suite 300 Sacramento, California 95834

Prepared by:

MTGL, Inc. 7742 Arjons Drive San Diego, California 92126 858-537-3999

Project Number:

SDPE-24-061.1CT

Michelle Ehresman, CAC, LIA/LPM, ICRA Certification Number: CDPH# 0458/0459

Report Issuance Date: April 18, 2024

TABLE OF CONTENTS

SECTION

INTRODUCTION	
General Information	
Authorization Performance	
Terrormance	
WARRANTY	
METHODOLOGY	
General References	
Lead Sampling Procedures Performance Characteristic Sheets	
Performance Characteristic Sneets	
SUMMARY of FINDINGS	
Lead-Based Paint Summary	
HAZARD CONTROL AND ABATEMENT OPTIONS &LEAD SAFE WORK PRACTICES	
LEAD BASED PAINT DISCLOSURE	
APPENDICES	•••••
Appendix 1 –XRF Data Report and Performance Characteristic Sheet	
Appendix 2 – Site Drawing	
Appendix 3 – Glossary	
Appendix 4 – Inspector Certification	
Appendix 5 – CDPH 8552 Form	
Appendix 6 – Renovate Right	

GENERAL INFORMATION

MTGL was retained by Vanir Construction to conduct a lead-based paint inspection at the subject property located at 331 The City Drive in Orange, California 92868. All inspections were in accordance with the guidelines set forth in the U.S. Department of Housing and Urban Development. This document is prepared for the sole use of Vanir Construction and/or any Regulatory or Governmental agencies that may directly become involved with this project.

MTGL's scope of work was limited to the following Client specified locations at the property:

• Building 1 (Single story modular with wood frame on a raised foundation.)

PURPOSE

The purpose of this inspection is to identify and assess painted components at the subject location above specified regulatory action levels within the Client specified scope of work.

AUTHORIZATION

Authorization to perform the survey was given by Mr. Scott Battles with a notice to proceed via proposal SDPE-24-061.1CT.

PERFORMANCE

All visual inspections and component testing was performed in accordance with Federal, State and local requirements. The inspection was performed by Michelle Ehresman, a California Certified Lead Inspector/Assessor on April 1, 2024.

LEAD-BASED PAINT SURVEY

MTGL, Inc. warrants that the findings contained herein have been prepared with the level of care and skill exercised by experienced and knowledgeable environmental consultants who are appropriately licensed or otherwise trained to perform lead-based paint assessments pursuant to the scope of work required on this project.

MTGL, Inc. warrants that the findings contained herein have been prepared in general accordance with accepted professional practices as applied by similar professionals in the community at the time of its preparation. Changes in the state of the art or in applicable regulations cannot be anticipated and have not been addressed in this report.

The survey included the inspection of accessible materials only. MTGL did not inspect or sample inaccessible areas such as behind walls or within ductwork and did not dismantle any part of the structure to survey inaccessible areas. For the purpose of this warranty, inaccessible is defined as areas of the building that could not be tested (sampled) without destruction of the structure or a portion of the structure. Inaccessible materials that are visible to MTGL inspectors shall be assumed to be lead-based paint coated.

It is the owner's legal obligation to disclose the inspection results to tenants and/or purchasers before obligation under 24 CFR part 35 and 40 CFR part 745 (published in the Federal Register, Volume 61, Number 45, March 6, 1996, starting on P. 9064; copies of the regulations and related materials can be obtained from the National Lead Information Center Clearinghouse, (1-800-424-LEAD)

GENERAL REFERENCES

LEAD-BASED PAINT

Lead-based paint testing was conducted in accordance with the Title 17, California Code of Regulations, Division 1, Chapter 8, Accreditation, Certification and Work Practices in Lead-Related Construction, Section 36000 and the United States Department of Housing and Urban Developments *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, Chapter 7 Lead-Based Paint Inspections*, as published in June 1995 and revised in 1997.

The State of California, HUD and the EPA currently define lead-based paint as paints or other surface coatings, which contain lead equal to or greater than 1.0 milligrams of lead per square centimeter of surface area (mg/cm²), or equal to or greater than 0.5% by weight.

Lead-based paint testing was conducted using portable x-ray fluorescence (XRF) spectrum analyzer, Model Niton XLP 300, Manufactured by Niton, Inc. The Niton XLP 300 is calibrated to measure the K-shell x-ray emissions of lead. The K-shell is normally used for paint analysis because it measures lead in all layers of paint films, including the lower layers where higher concentrations of lead are usually found. An initial calibration and ending calibration is validated each day with a laminated Lead Paint Standards testing card which is provided by the manufacturer. The card is a direct comparison to the paint standard to NIST kit SRM2579a with a spectrum analyzer. If an instrument does not maintain consistent calibrations after following the manufacturer's recommendation, the unit is removed from the site and sent back to the manufacturer for service.

In the instance where paint chip samples are collected, sample collections are conducted by the requirements of the American Society of Testing and Materials standard E 1729, Standard Practice for Field Collection of Dried Paint Samples for Lead Determination by Atomic Spectrometry Techniques and HUD Guidelines.

Performance Characteristic Sheet (PCS)

Performance Characteristic Sheets for most XRF models can be found on the U.S. Department of Housing and Urban Developments Office of Healthy Homes and Lead Hazard Control website, specifically HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.(http://www.hud.gov/offices/lead/lbp/hudguidelines/index.cfm).Operating specification and procedures for the XRF used for this survey can be downloaded at the website above. PCS's can also be obtained by calling toll free to the National Lead Information Clearinghouse, at 800-424-LEAD. Persons with hearing or speech impediments may access the above number via TTY by calling the Federal Information Relay Service at 800-887-8339, toll free.

GENERAL SUMMARY

Lead-Based Paint Inspection Results

The purpose of the lead-based paint survey was to evaluate the referenced facility's painted components that may contain lead-based paint. Suspect components identified during the survey included but not limited to the following:

- Interior: Door and Window Components, Wall, Floor and Ceilings
- Exterior: Wall, Trim, Windows and Doors

The following is a summary of lead based painted components identified that contain lead 1.0 mg/cm² or greater * (Please see attachment I for a detail report of findings.)

• No lead-based paint was identified in the components tested.

*MTGL, Inc. is not responsible for actual quantity of the material(s). MTGL recommends bidding contractors to calculate quantities for estimated abatement costs. When evaluating this report, it is assumed that according to Chapter 7 HUD guidelines, that if one testing combination (i.e. window, door) is positive for lead in an interior or exterior room equivalent, that all other similar testing combinations in those areas are assumed to be positive.

Deteriorated lead-based paint was not identified on the accessible components tested.

When evaluating this report, it is assumed that according to Chapter 7 HUD guidelines, that if one testing combination (i.e. window, door) is positive for lead in an interior or exterior room equivalent, that all other similar testing combinations in those areas are assumed to be positive.

Current EPA and Cal/EPA regulations do not require lead-based paint to be removed prior to demolition, unless found to be loose and peeling. Provided that paints are securely adhered to the substrates, deposal of the debris can be handled in California as non-hazardous and non-RCRA waste, pending characterization of the waste.

Loose and peeling paints or other wastes exceeding the Total Threshold Level Concentration (TTLC) of 1,000 ppm ($\mu g/g$) would be required to be disposed of as non-RCRA hazardous waste. However, if the leachable lead contents of the wasted exceed the Soluble Threshold Level Concentrations (STLC) of 5 mg/liter, the wastes must be disposed of as RCRA waste.

Several government agencies have definitions for what amount of lead constitutes paint to be considered "lead-based". The Department of Housing and Urban Development (HUD) has designated the amount to be 1.0 mg/cm²- 0.5% by weight or 5000 ppm (parts per million). The HUD regulations are related to potential hazards in the home environment and not to construction activities. The amount designated for high contact play areas is 400 ppm.

Lead Safe Work Practice Requirements for Maintenance, Renovation or Remodeling

EPA's RRP Rule requires anyone (remodeling, renovation and painting contractors and most other trades) who works in pre-1978 housing for compensation and who might disturb painted surfaces to become an EPA Certified Renovator by taking an 8-hour RRP "Lead Safe Work Practices" class from an EPA accredited training provider. The initial certification is good for five (5) years. To "renew" contractors must take a 4-hour RRP Refresher class before their initial certification expires. The RRP rule applies to anyone who works for compensation in pre-1978 housing and/or child-occupied facilities who might disturb painted surfaces, including:

- General contractors
- Demolition workers
- Remodeling contractors
- Maintenance workers in multi-family housing
- Painters, plumbers and most specialty trades.

The RRP rule covers a lot of jobs: renovation, remodeling, painting, window replacement, plumbing, electrical work, heating & air-conditioning, demolition, plus work performed by trades like carpenters, electricians and handymen. The rule also applies to persons working for rental property owners, schools, and day care providers. And, it applies to non-profits and governmental agencies. The RRP Rule requires that "Lead Safe Work Practices" be used when disturbing more than 6 square feet per room or 20 square feet outside.

It shall be noted that California's lead-based paint regulations cover ALL pre-78 structures that have not been tested - not just Target Housing and Child-Occupied Facilities. (Title 17, CCR, Div 1, Ch 8). Since 2003, California law (Title 17) has required that "Lead Safe Work Practices" be used in ALL pre-1978 structures when disturbing any amount of known or "presumed" lead-based paint. Contractors may have taken additional training to meet State of California requirements for Lead-Related Construction and obtain the required California Department of Public Health-Lead Related Construction Certifications for permanent abatement. This certification supplements but does not replace the EPA RRP certification. CDPH State Certified Lead Abatement Supervisors and Workers must also become RRP certified, and abatement firms must also be RRP Certified if they do non-abatement jobs.

Contractors and renovators who work or compensation in pre-1978 housing and/or a child-occupied facility that will disturb painted surfaces greater than 6 square feet per room or 20 square feet outside must give Clients a pamphlet called "Renovate Right" and get a signed receipt before beginning a job. Contractors can call (800) 424-5323 and ask for free copies of "Renovate Right" and the "Small Entity Compliance Guide to Renovate Right" or both can be downloaded as PDF files from the EPA website.

The Consumer Product Safety Commission (CPSC) has defined lead-based paint as surface coatings containing lead concentrations greater than 90 ppm. All children's products, and some furniture, for adult and children, must not contain a concentration of lead greater than 0.009 percent (90 parts per million) in paint or any similar surface coatings. Household paint must also meet this requirement. In 1978, the CPSC banned the sale of lead-based paint to consumers and the use of lead-based paint in residences and public buildings.

Please note that the detection of any amount of lead in a component will trigger numerous requirements from the California Occupations Safety and Health Administration (Cal-OSHA) lead in construction standard (e.g., Title 8, CCR Section 1532.1), even with common tasks such as drywall demolition, manual paint scraping, and manual paint sanding. The employer is required to conduct air sampling to determine the exposure to lead during these tasks and during other tasks that could result in lead exposure. Until actual exposures are determined, workers are required to wear respirators that are appropriate to the task. Detailed requirements are published in the Cal-OSHA standard for lead in construction.

All workers who may be exposed to lead must be trained in the hazards of lead. The results of air sampling are used to determine if workers are exposed to lead above the action level (AL) of 30 micrograms per cubic meter of air or above the permissible exposure limit (PEL) of 50 micrograms of lead per cubic meter of air, averaged over an 8-hour shift. Exposures above the AL or PEL will trigger additional requirements including engineering controls, proper housekeeping, washing facilities for hand and face washing, additional worker training, respiratory protection, medical monitoring, and additional air sampling. The employer must have a written compliance plan.

Lead Paint

Interim controls which are temporary measures may include the following:

- Paint Film Stabilization: "scrape off the loose and flakey paint and reapply with regular house paint".
- Friction (places that rub) and Impact (places that are bumped or banged) Surface Treatments (Doors, windows, cabinets, floors, etc): treated by covering the surfaces with an abrasion-resistant material, or by repairing to an intact working condition in order to minimize dust.
- Special Cleaning: reduction of lead hazard by cleaning up visible dust by HEPA vacuuming, washing and HEPA vacuuming again.

Interim controls typically last less than 20 years and will require the reevaluation of components on a periodic basis.

As of April 22, 2010, the EPA passed the Renovator, Repair and Paint Rule (RRP) (40 CFR Part 745.90) which states all renovation and painting contractors and other trades who work in pre-1978 housing and who might disturb painted surfaces must become Lead Certified Renovators by taking a one-day course about using "Lead Safe Work Practices" on the job.

Abatement methods which eliminate or put a barrier in front of lead hazards may include the following:

- Encapsulation: covering lead paint with a special liquid or thick coating (not regular paint). Works well on surfaces that are in good condition and should not be used on friction or impact surfaces.
- Enclosure: covering lead paint with a solid, dust-tight barrier that is usually mechanically attached (sheetrock, paneling, drywall).
- Replacement: removal of lead covered components (doors, windows, molding) and replacing with lead free components.
- Removal: recommended when other options may not be feasible; removal of lead paint by means of heat guns, scraping and sanding, power tools, chemical stripping and/or use of abrasives and hydro blasting.

Abatement controls typically last more than 20 years. Abatement methods that will result in the smallest amount of dust generated are preferred. Workers who partake in the above abatement methods should be California State Certified Lead Supervisors and Workers. Clearance sampling after abatement must be conducted by a certified lead-based paint inspector

Lead Safe Work Practice Requirements for Maintenance, Renovation or Remodeling

Lead-based paint, deteriorated paint or lead-based hazards require lead safe work practices. These practices are necessary for regular lead based paint hazard controls, repair, remodeling, renovation or other work activities that may disturb lead based paint above HUD's de minimis levels. HUD describes de minimus levels as follows:

- 20 square feet on exterior surfaces
- 2 square feet in any one interior room or space
- 10% of a type of building component with a small surface area (such as painted windowsills) on interior or exterior surfaces

Workers who may disturb lead-based paint above the de minimis level during repair, renovation or maintenance activities or any other work efforts that disturbs a known or assumed lead-based paint above HUD's de minimis shall be trained in lead safe work practices.

Firms providing abatement services must be certified as an abatement firm by the EPA or the State. Workers conducting abatement must be trained and certified as abatement workers by a training provider accredited by the EPA or State.

SECTION 6 DISCLOSURE

A copy of this summary must be provided to new lessees (tenants) and purchasers of this property under Federal Law (24 CFR part 35 and 40 CFR part 745) before they become obligated under a lease or sales contract. The complete report must also be provided to new purchasers and it must be made available to new tenants. Landlords (lessors) and sellers are also required to distribute an educational pamphlet and include standard warning language in their leases or sales contracts to ensure that parents have the information they need to protect their children from lead-based paint hazards.

It is the owner's legal obligation to disclose the inspection results to tenants and/or purchasers before obligation under 24 CFR part 35 and 40 CFR part 745 (published in the Federal Register, Volume 61, Number 45, March 6, 1996, starting on P. 9064; copies of the regulations and related materials can be obtained from the National Lead Information Center Clearinghouse, (1-800-424-LEAD).

SECTION 7 Appendices

Appendix 1

XRF Data Sheet

and

Performance Characteristic Sheet (PCS)

Lead Based Paint XRF Data Sheet

Project: Vanir- Juvenile Hall-Building 1, 331 The City Drive, Orange, CA 92868

Inspection Date: April 1, 2024

(EPA Regulated Lead-Based Paint= 1.0 mg/cm²)

(County of Los Angeles= 0.7mg/cm²) (<LOD= Below Limit of Detection)

,					Comp	onent					
Sample #	Unit	Side	Location	Test Location	Structure	Member	Paint Condition	Substrate	Color	XRF Reading (mg/cm2)	Classification (pos, neg, inc.)
1	Bldg. 1		Calibration						Red NIST	1.0	
2	Bldg. 1		Calibration						Red NIST	1.1	
3	Bldg. 1		Calibration						Red NIST	1.0	
4	Bldg. 1	A	Entry	Door	Door		Intact	Metal	Brown	<lod< td=""><td>Negative</td></lod<>	Negative
5	Bldg. 1	A	Entry	Door	Door	Frame	Intact	Metal	Brown	<lod< td=""><td>Negative</td></lod<>	Negative
6	Bldg. 1	A	Entry	Wall			Intact	Drywall	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
7	Bldg. 1	В	Entry	Wall			Intact	Drywall	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
8	Bldg. 1	С	Entry	Wall			Intact	Drywall	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
9	Bldg. 1	D	Entry	Wall			Intact	Drywall	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
10	Bldg. 1	В	Entry	Window	Frame		Intact	Metal	Brown	<lod< td=""><td>Negative</td></lod<>	Negative
11	Bldg. 1	В	Entry	Window	Casing		Intact	Wood	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
12	Bldg. 1	D	Women's RR	Door	Door		Intact	Metal	Brown	<lod< td=""><td>Negative</td></lod<>	Negative
13	Bldg. 1	A	Women's RR	Door	Frame		Intact	Wood	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
14	Bldg. 1	В	Women's RR	Wall			Intact	Drywall	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
15	Bldg. 1	C	Women's RR	Wall			Intact	Drywall	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
16	Bldg. 1	D	Women's RR	Wall			Intact	Drywall	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
17	Bldg. 1	D	Waiting rm	Door	Door		Intact	Metal	Brown	<lod< td=""><td>Negative</td></lod<>	Negative
18	Bldg. 1	D	Waiting rm	Door	Frame		Intact	Wood	Brown	<lod< td=""><td>Negative</td></lod<>	Negative
19	Bldg. 1	D	Waiting rm	Window	Frame		Intact	Wood	White	<lod< td=""><td>Negative</td></lod<>	Negative
20	Bldg. 1	В	Guard rm	Door	Door		Intact	Wood	Brown	<lod< td=""><td>Negative</td></lod<>	Negative
21	Bldg. 1	В	Guard rm	Door	Frame		Intact	Metal	Brown	<lod< td=""><td>Negative</td></lod<>	Negative
22	Bldg. 1	В	Guard rm	Wall	Cabinet	Casing	Intact	Wood	Tan	.12	Negative
23	Bldg. 1	В	Guard rm	Wall	Cabinet	Door	Intact	Wood	Tan	.12	Negative

Lead Based Paint XRF Data Sheet

Project: Vanir- Juvenile Hall-Building 1, 331 The City Drive, Orange, CA 92868

Inspection Date: April 1, 2024

(EPA Regulated Lead-Based Paint= 1.0 mg/cm²) (County of Los Angeles= 0.7mg/cm²) (<LOD= Below Limit of Detection)

			ĺ		Comp	onent					
Sample #	Unit	Side	Location	Test Location	Structure	Member	Paint Condition	Substrate	Color	XRF Reading (mg/cm2)	Classification (pos, neg, inc.)
24	Bldg. 1	A	Guard rm	Window	Frame		Intact	Wood	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
25	Bldg. 1	A	Guard rm	Window	Casing		Intact		Tan	<lod< td=""><td>Negative</td></lod<>	Negative
26	Bldg. 1	A	Server rm	Wall			Intact	Drywall	White	<lod< td=""><td>Negative</td></lod<>	Negative
27	Bldg. 1	В	Server rm	Wall			Intact	Drywall	White	<lod< td=""><td>Negative</td></lod<>	Negative
28	Bldg. 1	С	Server rm	Wall			Intact	Drywall	White	<lod< td=""><td>Negative</td></lod<>	Negative
29	Bldg. 1	D	Server rm	Wall			Intact	Drywall	White	<lod< td=""><td>Negative</td></lod<>	Negative
30	Bldg. 1	A	Server rm	Wall	ISUI	Panel	Intact	Metal	Gray	<lod< td=""><td>Negative</td></lod<>	Negative
31	Bldg. 1	A	Server rm	Wall	ISUI	Panel	Intact	Metal	Gray	<lod< td=""><td>Negative</td></lod<>	Negative
32	Bldg. 1	C	Server rm	Door	Door		Intact	Wood	Brown	<lod< td=""><td>Negative</td></lod<>	Negative
33	Bldg. 1	C	Server rm	Door	Frame		Intact	Metal	Brown	<lod< td=""><td>Negative</td></lod<>	Negative
34	Bldg. 1	С	Breakroom	Door	Door		Intact	Wood	Brown	<lod< td=""><td>Negative</td></lod<>	Negative
35	Bldg. 1	С	Breakroom	Door	Frame		Intact	Metal	Brown	<lod< td=""><td>Negative</td></lod<>	Negative
36	Bldg. 1	A	Breakroom	Wall			Intact	Drywall	White	<lod< td=""><td>Negative</td></lod<>	Negative
37	Bldg. 1	В	Breakroom	Wall			Intact	Drywall	White	<lod< td=""><td>Negative</td></lod<>	Negative
38	Bldg. 1	С	Breakroom	Wall			Intact	Drywall	White	<lod< td=""><td>Negative</td></lod<>	Negative
39	Bldg. 1	D	Breakroom	Wall			Intact	Drywall	White	<lod< td=""><td>Negative</td></lod<>	Negative
40	Bldg. 1	D	Kitchen	Wall	Cabinet	Door	Intact	Wood	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
41	Bldg. 1	D	Kitchen	Wall	Cabinet	Casing	Intact	Wood	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
42	Bldg. 1	В	Staff WRR	Door	Door		Intact	Wood	Brown	<lod< td=""><td>Negative</td></lod<>	Negative
43	Bldg. 1	В	Staff WRR	Door	Frame		Intact	Metal	Brown	<lod< td=""><td>Negative</td></lod<>	Negative
44	Bldg. 1	A	Staff WRR	Wall	Sink		Intact	Porcelain	White	<lod< td=""><td>Negative</td></lod<>	Negative
45	Bldg. 1	В	Office 1	Door	Door		Intact	Wood	Brown	<lod< td=""><td>Negative</td></lod<>	Negative
46	Bldg. 1	В	Office 1	Door	Frame		Intact	Wood	Brown	<lod< td=""><td>Negative</td></lod<>	Negative

Lead Based Paint XRF Data Sheet

Project: Vanir- Juvenile Hall-Building 1, 331 The City Drive, Orange, CA 92868

Inspection Date: April 1, 2024

(EPA Regulated Lead-Based Paint= 1.0 mg/cm²)

(County of Los Angeles= 0.7mg/cm²) (<LOD= Below Limit of Detection)

					Comp	onent					
Sample #	Unit	Side	Location	Test Location	Structure	Member	Paint Condition	Substrate	Color	XRF Reading (mg/cm2)	Classification (pos, neg, inc.)
47	Bldg. 1	A	Office 1	Wall			Intact	Drywall	White	<lod< td=""><td>Negative</td></lod<>	Negative
48	Bldg. 1	В	Office 1	Wall			Intact	Drywall	White	<lod< td=""><td>Negative</td></lod<>	Negative
49	Bldg. 1	C	Office 1	Wall			Intact	Drywall	White	<lod< td=""><td>Negative</td></lod<>	Negative
50	Bldg. 1	D	Exterior	Wall			Intact	Drywall	White	<lod< td=""><td>Negative</td></lod<>	Negative
51	Bldg. 1	A	Exterior	Ramp	Handrail		Poor	Metal	Gray	.10	Negative
52	Bldg. 1	A	Exterior	Wall	Panel		Intact	Wood	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
53	Bldg. 1	A	Exterior	Wall	Trim		Poor	Wood	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
54	Bldg. 1	A	Exterior	Door 2	Door		Poor	Metal	Brown	.10	Negative
55	Bldg. 1	A	Exterior	Door 2	Frame		Poor	Metal	Brown	.11	Negative
56	Bldg. 1	A	Exterior	Air handler	Casing		Fair	Metal	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
57	Bldg. 1	A	Exterior	Wall	Gutter		Intact	Metal	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
58	Bldg. 1	D	Exterior	Window 1	Frame		Intact	Metal	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
59	Bldg. 1	D	Exterior	Window 1	Casing		Poor	Wood	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
60	Bldg. 1	D	Exterior	Wall			Poor	Wood	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
61	Bldg. 1	D	Exterior	Wall	Trim		Poor	Wood	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
62	Bldg. 1	A	Exterior	Window 1	Frame		Fair	Metal	Tan	.08	Negative
63	Bldg. 1	A	Exterior	Window 1	Casing		Poor	Wood	Tan	.06	Negative
64	Bldg. 1	A	Calibration	Wall	Foundation		Intact	Concrete	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
65	Bldg. 1		Calibration							1.0	

Performance Characteristic Sheet

EFFECTIVE DATE: September 24, 2004 EDITION NO.: 1

MANUFACTURER AND MODEL:

Make: Niton LLC
Tested Model: XLp 300
Source: 109Cd

Note: This PCS is also applicable to the equivalent model variations indicated

below, for the Lead-in-Paint K+L variable reading time mode, in the XLi and

XLp series:

XLi 300A, XLi 301A, XLi 302A and XLi 303A. XLp 300A, XLp 301A, XLp 302A and XLp 303A. XLi 700A, XLi 701A, XLi 702A and XLi 703A. XLp 700A, XLp 701A, XLp 702A, and XLp 703A.

Note: The XLi and XLp versions refer to the shape of the handle part of the instrument. The differences in the model numbers reflect other modes available, in addition to Lead-in-Paint modes. The manufacturer states that specifications for these instruments are identical for the source, detector, and detector electronics relative to the Lead-in-Paint mode.

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

Lead-in-Paint K+L variable reading time mode.

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm² (inclusive)

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm² in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm² film).

If readings are outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instruments into control before XRF testing proceeds.

SUBSTRATE CORRECTION:

For XRF results using Lead-in-Paint K+L variable reading time mode, substrate correction is <u>not</u> needed for: Brick, Concrete, Drywall, Metal, Plaster, and Wood

INCONCLUSIVE RANGE OR THRESHOLD:

K+L MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm²)
Results not corrected for substrate bias on any	Brick	1.0
substrate	Concrete	1.0
	Drywall	1.0
	Metal	1.0
	Plaster	1.0
	Wood	1.0

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* ("HUD Guidelines"). Performance parameters shown on this sheet are calculated from the EPA/HUD evaluation using archived building components. Testing was conducted in August 2004 on 133 testing combinations. The instruments that were used to perform the testing had new sources; one instrument's was installed in November 2003 with 40 mCi initial strength, and the other's was installed June 2004 with 40 mCi initial strength.

OPERATING PARAMETERS:

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

SUBSTRATE CORRECTION VALUE COMPUTATION:

Substrate correction is not needed for brick, concrete, drywall, metal, plaster or wood when using Lead-in-Paint K+L variable reading time mode, the normal operating mode for these instruments. If substrate correction is desired, refer to Chapter 7 of the HUD Guidelines for guidance on correcting XRF results for substrate bias.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing. Use the K+L variable time mode readings.

Conduct XRF retesting at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below.

Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family housing a result is defined as the average of three readings. In multifamily housing, a result is a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF results.

Compute the average of all ten re-test XRF results.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

TESTING TIMES:

For the Lead-in-Paint K+L variable reading time mode, the instrument continues to read until it is moved away from the testing surface, terminated by the user, or the instrument software indicates the reading is complete. The following table provides testing time information for this testing mode. The times have been adjusted for source decay, normalized to the initial source strengths as noted above. Source strength and type of substrate will affect actual testing times. At the time of testing, the instruments had source strengths of 26.6 and 36.6 mCi.

Testing Times Using K+L Reading Mode (Seconds)										
		All Data		Median for laboratory-measured lead levels (mg/cm²)						
Substrate	25 th Percentile	Median	75 th Percentile	Pb < 0.25	0.25 <u><</u> Pb<1.0	1.0 <u><</u> Pb				
Wood Drywall	4	11	19	11	15	11				
Metal	4	12	18	9	12	14				
Brick Concrete Plaster	8	16	22	15	18	16				

CLASSIFICATION RESULTS:

XRF results are classified as positive if they are greater than or equal to the threshold, and negative if they are less than the threshold.

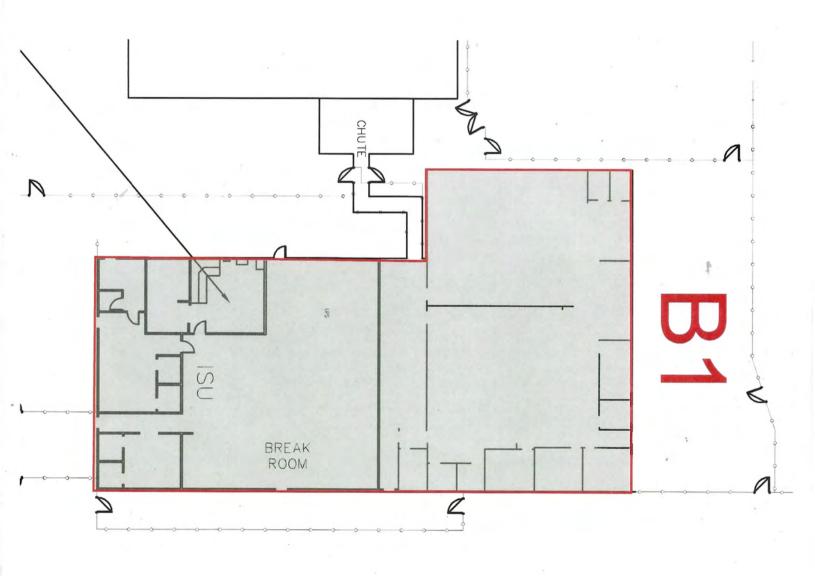
DOCUMENTATION:

A document titled *Methodology for XRF Performance Characteristic Sheets* provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. For a copy of this document call the National Lead Information Center Clearinghouse at 1-800-424-LEAD.

This XRF Performance Characteristic Sheet was developed by the Midwest Research Institute (MRI) and QuanTech, Inc., under a contract between MRI and the XRF manufacturer. HUD has determined that the information provided here is acceptable when used as guidance in conjunction with Chapter 7, Lead-Based Paint Inspection, of HUD's *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*.

APPENDIX 2 SITE DRAWING

No lead based paint reported.



Appendix 3

Glossary





Glossary

AALA: American Association for Laboratory Accreditation. Also known as A2LA.

Abatement: A measure or set of measures designed to permanently eliminate lead-based paint hazards or lead-based paint. Abatement strategies include the removal of lead-based paint, enclosure, encapsulation, replacement of building components coated with lead-based paint, removal of lead-contaminated dust, and removal of lead-contaminated soil or overlaying of soil with a durable covering such as asphalt (grass and sod are considered interim control measures). All of these strategies require preparation; cleanup; waste disposal; postabatement clearance testing; recordkeeping; and, if applicable, monitoring. See also Complete abatement and Interim controls.

Abrasion resistance: Resistance of the paint to wear by rubbing or friction; related to both toughness and gloss.

Accessible surface: Any protruding interior or exterior surface, such as an interior window sill, that a young child can mouth or chew.

Accreditation: A formal recognition that an organization, such as a laboratory, is competent to carry out specific tasks or types of tests.

Accredited laboratory: A laboratory that has been evaluated and approved by the National Lead Laboratory Accreditation Program (NLLAP), to perform lead measurement or analysis, usually over a specified period of time.

Accredited training provider: A training provider who meets the standards established by EPA for the training of risk assessors, inspectors, lead-based paint hazard control contractors, and workers.

Accuracy: The degree of agreement between an observed value and an accepted reference value (a "true" value); a data quality indicator. Accuracy includes a combination of random errors (precision) and systematic errors (bias) due to sampling and analysis.

Acrylic: A synthetic resin used in highperformance waterborne coatings; a coating whose binder contains acrylic resins.

Adhesion: The ability of dry paint or other coating to attach to a surface and remain fixed on it without blistering, flaking, cracking, or being susceptible to removal by tape.

Administrative removal: The temporary removal of workers from the job to prevent the concentration of lead in their blood from reaching levels requiring medical removal.

AIHA: American Industrial Hygiene Association.

ALC: See Apparent Lead Concentration.

Aliquot: See Subsample.

Alkali: A chemical, such as lye, soda, lime, etc., that will neutralize an acid. Oil paint films can be destroyed by alkalies. Some paint removal products contain alkaline substances.

Alkyd: Synthetic resin modified with oil; coating that contains alkyd resins in the binder.

Apparent Lead Concentration (ALC): The x-ray fluorescence (XRF) reading or average of more than one reading on a *painted* surface. See also XRF analyzer, Substrate Equivalent Lead (SEL), and Corrected Lead Concentration (CLC).

Bare soil: Soil not covered with grass, sod, some other similar vegetation, or paving, including the sand in sandboxes.





Bias: A systematic error in the measurement process. For XRF readings, one source of bias is the substrate effect. See also Substrate effect and XRF analyzer.

Biennial report (for hazardous waste): A report (EPA Form 8700–13A) submitted by generators of hazardous waste to the EPA Regional Administrator. The report is due on March 1 of even-numbered years. The report includes information on the generator's activities during the previous calendar year. The owners and operators of treatment, storage, and disposal facilities must also prepare and submit biennial reports using EPA Form 8700–1313.

Binder: Solid ingredients in a coating that hold the pigment particles in suspension and bind them to the substrate. Binders used in paints and coatings include oil, alkyd, acrylic, latex, and epoxy. The nature and amount of binder determines many of the coating's performance properties—washability, toughness, adhesion, gloss, etc. See also Pigment.

Biological monitoring: The analysis of blood, urine, or both to determine the level of lead contamination in the body. Blood lead levels are expressed in micrograms of lead per deciliter (one-tenth of a liter) of blood, or $\mu g/dL$. They are also expressed in micromoles per liter ($\mu mol/L$).

Blank: A nonexposed sample of the medium being used for testing (i.e., wipe or filter) that is analyzed to determine if the medium has been contaminated with lead (e.g., at the factory or during transport).

Blind sample: A subsample submitted for analysis with a composition and identity known to the submitter but not to the analyst; used to test the analyst's or laboratory's proficiency in conducting measurements. See also Spiked sample.

Blood lead threshold: Any blood lead level greater than or equal to 10 μ g/dL as defined by the Centers for Disease Control and Prevention. See also Elevated Blood Lead level (EBL) child.

Building component: Any element of a building that may be painted or have dust on its surface, e.g. walls, stair treads, floors, railings, doors, window sills, etc.

Building component replacement: See Replacement.

Cementitious material: A material that is mixed with water, either with or without aggregate, to provide the plasticity, cohesion, and adhesion necessary for the placement and formation of a rigid mass (ASTM Standard C 11).

Centimeter: See cm.

Certification: The process of testing and evaluating against certain specifications the competence of a person, organization, or other entity in performing a function or service, usually for a specified period of time.

Certified: The designation for contractors who have completed training and other requirements to allow them to safely undertake risk assessments, inspections, or abatement work. Risk assessors, inspectors, and abatement contractors should be certified by the appropriate local, State or Federal agency.

Certified Industrial Hygienist (CIH): A person who has passed the 2-day certification exam of the American Board of Industrial Hygiene, and who has at least 4 years of experience in industrial hygiene and a graduate degree or a total of 5 years of experience. See also Industrial hygienist.

Certified reference material (CRM): Reference material that has at least one of its property values established by a technically valid procedure and is accompanied by or traceable to a certificate or other documentation issued by a certifying body. See also Standard reference material.

CFR: See Code of Federal Regulations.

Chalking: The photo-oxidation of paint binders—usually due to weathering—that causes a powder to form on the film surface.





Characteristics (of hazardous waste): EPA has identified four characteristics of hazardous waste: ignitability, corrosivity, reactivity, and toxicity (as determined by the TCLP test). Any solid waste that exhibits at least one of these characteristics may be classified as hazardous under the Resource Conservation and Recovery Act (RCRA), depending on how the waste is produced and what quantities are generated. See also Toxicity Characteristic Leaching Procedure (TCLP).

Chewable surface: See Chewed surface and Accessible surface.

Chewed surface: Any painted surface that shows evidence of having been chewed or mouthed by a young child. A chewed surface is usually a protruding, horizontal part of a building, such as an interior window sill. See also Accessible surface.

CLC: See Corrected Lead Concentration (CLC).

Cleaning: The process of using a HEPA vacuum and wet cleaning agents to remove leaded dust; the process includes the removal of bulk debris from the work area. OSHA prohibits the use of compressed air to clean lead-contaminated dust from a surface.

Clearance examination: Visual examination and collection of environmental samples by an inspector or risk assessor and analysis by an accredited laboratory upon completion of an abatement project, interim control intervention, or maintenance job that disturbs lead-based paint (or paint suspected of being lead-based). The clearance examination is performed to ensure that lead exposure levels do not exceed standards established by the EPA Administrator pursuant to Title IV of the Toxic Substances Control Act, and that any cleaning following such work adequately meets those standards.

Clearance examiner: A person who conducts clearance examinations following lead-based paint hazard control and cleanup work, usually a certified risk assessor or a certified inspector.

cm: Centimeter; 1/100 of a meter.

Code of Federal Regulations (CFR): The codification of the regulations of Federal agencies. The regulations are published in the Federal Register. See also Federal Register (FR).

Cohesion: Ability of a substance to adhere to itself; internal adhesion; the force holding a substance together.

Common area: A room or area that is accessible to all residents in a community (e.g., hallways or lobbies); in general, any area not kept locked.

Competent person: As defined in the OSHA Lead Construction Standard (29 CFR 1926.62), a person who is capable of identifying or predicting hazardous working conditions and work areas, and who has authorization to take prompt, corrective measures to eliminate the hazards. A competent person is not necessarily a risk assessor, inspector, or abatement project supervisor.

Complete abatement: Abatement of all lead-based paint inside and outside a dwelling or building and reduction of any lead-contaminated dust or soil hazards. All of these strategies require preparation; cleanup; waste disposal; postabatement clearance testing; recordkeeping; and, if applicable, reevaluation and on-going monitoring. See also Abatement.

Compliance plan: A document that describes the types of tasks, workers, protective measures, and tools and other materials that may be employed in lead-based paint hazard control to comply with the OSHA Lead Exposure in Construction standard.

Composite sample: A single sample made up of individual subsamples. Analysis of a composite sample produces the arithmetic mean of all subsamples.

Containment: A process to protect workers and the environment by controlling exposures to the lead-contaminated dust and debris created during abatement. See Worksite preparation level.





Contingency plan: A document that describes an organized, planned, and coordinated course of action to be taken during any event that threatens human health or the environment, such as a fire, explosion, or the release of hazardous waste or its constituents from a treatment, storage, or disposal facility.

Corrected Lead Concentration (CLC): The absolute difference between the Apparent Lead Concentration and the Substrate Equivalent Lead. See also Apparent Lead Concentration (ALC) and Substrate Equivalent Lead (SEL).

Detection limit: The minimum amount of a substance that can be reliably measured by a particular method.

Deteriorated lead-based paint: Any lead-based paint coating on a damaged or deteriorated surface or fixture, or any interior or exterior lead-based paint that is peeling, chipping, blistering, flaking, worn, chalking, alligatoring, cracking, or otherwise becoming separated from the substrate.

Digestion blank: A mixture of the reagents used for digesting of paint, soil, or dust matrixes but without the matrix. The blank undergoes all the steps of the analysis, starting with digestion. The blank is used to evaluate the contamination process from a laboratory.

Direct-reading XRF: An analyzer that provides the operator with a display of lead concentrations calculated from the lead K x ray intensity without a graphic of the spectrum usually in mg/cm² (milligrams of lead per square centimeter of painted surface area). See also XRF analyzer.

Disposal (of hazardous waste): The discharge, deposit, injection, dumping, spilling, leaking, or placement of solid or hazardous waste on land or in water so that none of its constituents can pollute the environment by being emitted into the air or discharged into a body of water, including groundwater.

Disposal facility: A facility or part of one in which hazardous waste is placed on land or in water to remain there after the facility closes.

Door mat: See Walk-off mat.

Dust removal: A form of interim control that involves initial cleaning followed by periodic monitoring and recleaning, as needed. Depending on the severity of lead-based paint hazards, dust removal may be the primary activity or just one element of a broader control effort.

Dust trap: A surface, component, or furnishing that serves as a reservoir where dust can accumulate.

EBL child: See Elevated Blood Lead level (EBL) child.

Efflorescence: The salt rising to the surface of a material, such as masonry, plaster, or cement, caused by the movement of water through the material. Paint or encapsulants may not adhere to a surface contaminated with efflorescence.

Elastomeric: A group of pliable, elastic liquid encapsulant coatings. An elastomer is a macromolecular material which, at room temperature, is capable of substantially recovering its size and shape after the force causing its deformation is removed (see ASTM D 907, D-14).

Elevated Blood Lead level (EBL) child: A child who has a blood lead level greater than or equal to 20 μg/dL or a persistent 15 μg/dL. See also Blood lead threshold.

Encapsulation: Any covering or coating that acts as a barrier between lead-based paint and the environment, the durability of which relies on adhesion and the integrity of the existing bonds between multiple layers of paint and between the paint and the substrate. See also Enclosure.

Enclosure: The use of rigid, durable construction materials that are mechanically fastened to the substrate to act as a barrier between the lead-based paint and the environment.





Engineering controls: Measures other than respiratory protection or administrative controls that are implemented at the work site to contain, control, and/or otherwise reduce exposure to lead-contaminated dust and debris usually in the occupational health setting. The measures include process and product substitution, isolation, and ventilation.

Epoxy paint: Paint based on an epoxy resin. An epoxy resin is a cross-linking resin the reactivity of which depends on the epoxide group.

Evaluation: Risk assessment, paint inspection, reevaluation, investigation, clearance examination, or risk assessment screen.

Examination: See Clearance examination.

Examiner: A person certified to conduct clearance examinations or reevaluations, usually a certified inspector or certified risk assessor.

Exposure monitoring: The sampling and analysis of air both inside and outside the work area to determine the degree of worker and resident exposure to lead or other airborne contaminants, often involving air sampling inside a worker's breathing zone.

Exterior work area: For lead hazard control work, the exterior work area includes any exterior building components, such as a porch or stairway; the safety perimeter; and access barriers.

Facility (pertaining to hazardous waste): All buildings, contiguous land, structures, and other appurtenances, as well as any improvements, where lead-based paint or hazardous waste is treated, stored, or disposed. A facility may consist of several different treatment, storage, or disposal units, such as landfills and surface impoundments.

Federal Register (FR): A daily Federal publication that contains proposed and final regulations, rules, and notices.

Fibermat: A semirigid woven material attached with a liquid adhesive to a surface or substrate.

Field blank: A clean sample of the matrix (e.g., filter, or wipe) that has been exposed to the sampling conditions; returned to the laboratory; and analyzed as an environmental sample. Clean quartz sand, air sampling filters and cassettes, and clean wipes can be used as field blanks. The field blank, which should be treated just like the sample, indicates possible sources of contamination.

FR: See Federal Register (FR).

Friction surface: Any interior or exterior surface, such as a window or stair tread, subject to abrasion or friction.

Generator: Any person whose act or operation produces hazardous waste identified or listed in 40 CFR Part 261 or whose act causes a hazardous waste to come under regulation (40 CFR 260.10).

Generator identification number: The unique number assigned by EPA to each generator; transporter of hazardous waste; and treatment, storage, or disposal facility.

Hazardous waste: As defined in EPA regulations (40 CFR 261.3), hazardous waste is solid waste or a combination of solid wastes that because of its quantity; concentration; or physical, chemical, or infectious characteristics may cause or significantly contribute to increases in mortality, serious and irreversible or incapacitating but reversible illnesses, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed. As defined in the regulations, solid waste is hazardous if it meets one of four conditions: (1) exhibits a characteristic of hazardous waste (40 CFR Sections 261.20 through 262.24); (2) has been listed as hazardous (40 CFR Section 261.31 through 261.33); (3) is a mixture containing a listed hazardous waste combined with a nonhazardous solid waste, unless the mixture is specifically excluded or no longer exhibits any of the characteristics of hazardous waste; and (4) is not excluded from regulation as hazardous waste. For lead-based paint abatement





waste, hazardous waste is waste that contains more than 5 ppm of leachable lead as determined by the TCLP test, or is waste that is corrosive, ignitable, or reactive and not otherwise excluded.

Hazardous Waste Manifest: See Manifest.

Heat gun: A device capable of heating leadbased paint causing it to separate from the substrate. For lead hazard control work, the heat stream leaving the gun should not exceed 1,100 °F (some authorities may use a different temperature).

HEPA filter: See High-Efficiency Particulate Air (HEPA) filter.

HEPA/wet wash/HEPA cycle: The cleaning cycle that begins with HEPA vacuuming, followed by a wet wash with a lead-specific cleaning agent, such as trisodium phosphate detergent or another liquid cleaning agent, followed by a final pass with a HEPA vacuum over the surface.

High-Efficiency Particulate Air (HEPA) filter: A filter capable of removing particles of 0.3 microns or larger from air at 99.97 percent or greater efficiency.

High phosphate detergent: See Trisodium phosphate (TSP) detergent.

Impact surface: An interior or exterior surface (such as surfaces on doors) subject to damage by repeated impact or contact.

Incinerator: An enclosed device using controlled flame combustion that neither meets the criteria for classification as a boiler nor is listed as an industrial furnace.

Industrial hygienist: A person having a college or university degree in engineering, chemistry, physics, medicine, or a related physical or biological science who, by virtue of special training, is qualified to anticipate, recognize, evaluate, and control environmental and occupational health hazards and the impact of those hazards on the community and workers.

In-place management: See Interim controls.

Inspection (of paint): A surface-by-surface investigation to determine the presence of lead-based paint (in some cases including dust and soil sampling) and a report of the results.

Inspector: An individual who has completed training from an accredited program and been licensed or certified by the appropriate State or local agency to (1) perform inspections to determine and report the presence of lead-based paint on a surface-by-surface basis through onsite testing, (2) report the findings of such an inspection, (3) collect environmental samples for laboratory analysis, (4) perform clearance testing, and (5) document successful compliance with lead-based paint hazard control requirements or standards.

Interim controls: A set of measures designed to temporarily reduce human exposure or possible exposure to lead-based paint hazards. Such measures include specialized cleaning, repairs, maintenance, painting, temporary containment, and management and resident education programs. Monitoring, conducted by owners, and reevaluations, conducted by professionals, are integral elements of interim control. Interim controls include dust removal; paint film stabilization; treatment of friction and impact surfaces; installation of soil coverings, such as grass or sod; and land-use controls. See also Monitoring, Reevaluation, and Abatement.

Interior window sill: The portion of the horizontal window ledge that protrudes into the interior of the room, adjacent to the window sash when the window is closed; often called the window stool.

Investigation (pertaining to EBL case): The process of determining the source of lead exposure for a child or other resident with an elevated blood lead level. Investigation consists of administration of a questionnaire, comprehensive environmental sampling, case management, and other measures.





Investigator: A person who conducts an investigation of a dwelling where a resident has an elevated blood lead level. The investigator must be proficient in interviewing techniques, environmental sampling, and the interpretation of risk assessment and environmental sampling data.

Laboratory analysis: A determination of the lead content by atomic absorption spectroscopy, inductively coupled plasma emission spectroscopy, or laboratory-based K or L x-ray fluorescence, or an equivalent method.

Landfill: A State-licensed or State-permitted disposal facility that meets municipal solid waste standards (see Federal regulations at 40 CFR 258).

Landfill liner: A continuous layer of natural or synthetic materials placed beneath and sometimes around a surface impoundment, landfill, or landfill cell. The layer restricts the downward or lateral escape of hazardous waste, hazardous waste constituents, or leachate (40 CFR Part 258).

Latex: A waterborne emulsion paint made with synthetic binders, such as 100-percent acrylic, vinyl acrylic, terpolymer, or styrene acrylic; a stable emulsion of polymers and pigment in water.

Lead: Lead includes metallic lead and inorganic and organic compounds of lead.

Lead-based paint: Any paint, varnish, shellac, or other coating that contains lead equal to or greater than 1.0 mg/cm² as measured by XRF or laboratory analysis, or 0.5 percent by weight $(5,000~\mu\text{g/g},\,5,000~\text{ppm},\,\text{or}\,5,000~\text{mg/kg})$ as measured by laboratory analysis. (Local definitions may vary.)

Lead-based paint hazard: A condition in which exposure to lead from lead-contaminated dust, lead-contaminated soil, or deteriorated lead-based paint would have an adverse effect on human health (as established by the EPA Administrator under Title IV of the Toxic Substances Control Act). Lead-based paint hazards

include for example, deteriorated lead-based paint, leaded dust levels above applicable standards, and bare leaded soil above applicable standards.

Lead-based paint hazard control: Activities to control and eliminate lead-based paint hazards, including interim controls, abatement, and complete abatement.

Lead-based paint abatement planner/designer: An individual who has completed an accredited training program on planning and designing lead-based paint abatement projects.

Lead-based paint abatement worker: See Worker.

Lead carbonate: A pigment used in some leadbased paints as a hiding agent; also known as white lead.

Lead-contaminated dust: Surface dust in residences that contains an area or mass concentration of lead in excess of the standard established by the EPA Administrator, pursuant to Title IV of the Toxic Substances Control Act. Until the EPA standards are set, the HUD-recommended clearance and risk assessment standards for leaded dust are 100 $\mu g/ft^2$ on floors, 500 $\mu g/ft^2$ on interior window sills, and 800 $\mu g/ft^2$ on window troughs. The recommended standard for lead hazard screens for floors is 50 $\mu g/ft^2$ and for window troughs is 400 $\mu g/ft^2$.

Lead-contaminated soil: Bare soil on residential property that contains lead in excess of the standard established by the EPA Administrator, pursuant to Title IV of the Toxic Substances Control Act. The HUD-recommended standard and interim EPA guidance is 400 $\mu g/g$ for high-contact play areas and 2,000 $\mu g/g$ in other bare areas of the yard. Soil contaminated with lead at levels greater than or equal to 5,000 $\mu g/g$ should be abated by removal or paving.

Lead-free dwelling: A lead-free dwelling contains no lead-based paint and has interior dust and exterior soil lead levels below the applicable HUD and EPA standards.





Lead hazard screen: A means of determining whether residences in good condition should have a full risk assessment. Also called a risk assessment screen.

Lead-poisoned child: A child with a single blood lead level that is greater than or equal to 20 μ g/dL or consecutive blood lead levels greater than or equal to 15 μ g/dL. Local definitions may vary.

Lead-specific detergent: A cleaning agent manufactured specifically for cleaning and removing leaded dust or other lead contamination.

Leaded dust: See Lead-contaminated dust.

Leaded zinc: A paint primer made from zinc oxide and lead sulfates.

Licensed: Holding a valid license or certification issued by EPA or by an EPA-approved State program pursuant to Title IV of the Toxic Substances Control Act. The license is based on certification for lead-based paint hazard control work. See also Certified.

Listed waste: A hazardous waste that has been placed on one of three lists developed by EPA: nonspecific source wastes, specific source wastes, and commercial chemical products. The lists were developed by examining different types of waste and chemical products to determine if they exhibited one of the four characteristics of hazardous waste (toxicity, corrosivity, ignitability, or reactivity), met the statutory definition of hazardous waste, were acutely toxic or acutely hazardous, or were otherwise toxic.

Maintenance: Work intended to maintain adequate living conditions in a dwelling, which has the potential to disturb lead-based paint or paint that is suspected of being lead-based.

Manifest: The shipping document (EPA Form 8700–22 or a comparable form required by the State or locality) used for identifying the quantity, composition, origin, routing, and destination of hazardous waste during its transport

from the point of generation to the point of treatment, storage, or disposal. Also, a shipping document used to keep track of items being transported. All hazardous waste must be accompanied by a manifest. See Hazardous waste.

Mat: See Walk-off mat.

Matrix blank: A sample of the matrix (paint chips, soil, or dust) that does not contain the analyte lead. This sample goes through the complete analysis, including digestion.

MDL: See Method detection limit (MDL).

Mean: The arithmetic average of a series of numerical data values; for example, the algebraic sum of the data values divided by the number of data values.

Medical removal: The temporary removal of workers from the job because of the occurrence of elevated blood lead levels as defined in the OSHA Lead Exposure in Construction standard (29 CFR 1926.62).

Method blank: See Digestion blank.

Method detection limit (MDL): The minimum concentration of an analyte that, for a given matrix and method, has a 99-percent probability of being identified, qualitatively or quantitatively measured, and reported to be greater than zero.

mg: Milligram; 1/1,000 of a gram.

Microgram: See µg.

Mil: 1/1,000 of an inch; used to measure thickness.

Milligram: See mg.

Monitoring: Surveillance to determine (1) that known or suspected lead-based paint is not deteriorating, (2) that lead-based paint hazard controls, such as paint stabilization, enclosure, or encapsulation have not failed, (3) that structural problems do not threaten the integrity of hazard controls or of known or suspected





lead-based paint, and (4) that dust lead levels have not risen above applicable standards. There are two types of monitoring activities; visual surveys by property owners and reevaluations by certified risk assessors. Visual surveys are generally conducted annually for the purpose of making the first three determinations listed above. Reevaluations are conducted in accordance with the Standard Reevaluation Schedule (or more frequently, if needed) for the purpose of making all four determinations. Monitoring is not required in properties known to be free of lead-based paint. See also Reevaluation and Standard reevaluation schedule.

Monofil: A State-approved landfill that accepts only construction debris.

Mouthable surface: See Chewed surface.

Multifamily housing: Housing that contains more than one dwelling unit per location.

NLLAP requirements: Requirements, specified by the EPA National Lead Laboratory Accreditation Program (NLLAP), for accreditation for the lead analysis of paint, soil, and dust matrixes by an EPA-recognized laboratory accreditation organization.

Offsite paint removal: The process of removing a component from a building and stripping the paint from the component at an offsite paint-stripping facility.

Ongoing monitoring: See Monitoring.

Owner: A person, firm, corporation, guardian, conservator, receiver, trustee, executor, government agency or entity, or other judicial officer who, alone or with others, owns, holds, or controls the freehold or leasehold title or part of the title to property, with or without actually possessing it. This definition includes a vendee who possesses the title, but does not include a mortgagee or an owner of a reversionary interest under a ground rent lease.

Oxidation: A chemical reaction that occurs upon exposure to oxygen. Some coatings cure by oxidation; oxygen enters the liquid coating and crosslinks (attaches) the resin molecules. This film-forming method is also called "air cure" or "air dry." Oxidation also causes rust to form on metals and paint to chalk.

Paint film stabilization: The process of wet scraping, priming, and repainting surfaces coated with deteriorated lead-based paint; paint film stabilization includes cleanup and clearance.

Paint removal: An abatement strategy that entails the removal of lead-based paint from surfaces. For lead hazard control work, this can mean using chemicals, heat guns below 1,100 °F, and certain *contained* abrasive methods. Open flame burning, open abrasive blasting, sandblasting, water blasting, and extensive dry scraping are prohibited paint removal methods. (Methylene chloride paint removers and dry scraping are also not recommended.)

Patch test: A test method or procedure to assess the adhesion of an encapsulant coating to a substrate covered with a layer or layers of lead-based paint.

Personal breathing zone samples: Air samples collected from the breathing zone of a worker (within a 1-foot radius of the worker's mouth) but outside the respirator. The samples are collected with a personal sampling pump operating at 2 liters per minute, drawing air through a 37 mm mixed cellulose ester filter housed in a closed-face cassette with a pore size of 0.8 microns. See Exposure monitoring.

Personal Protective Equipment (PPE): Equipment for protecting the eyes, face, head, and/or extremities; includes protective clothing, respiratory devices, and protective shields; used when hazards capable of causing bodily injury or impairment are encountered.





PHA: See Public Housing Agency (PHA).

Pigment: Insoluble, finely ground materials that give paint its properties of color and hide.

Pigment Volume Concentration (PVC): Pigment volume as a percentage of the total non-volatile ingredients.

Pilot project: In multifamily housing, the testing of a lead-based paint hazard control strategy on a limited number of dwellings, usually those that are vacant, to determine the feasibility of carrying out such a strategy in the entire multifamily housing development; usually involves paint testing, air sampling, wipe sampling, worksite preparation, and a variety of lead-based paint hazard control treatments.

Plastic: See Polyethylene plastic.

Polyethylene plastic: All references to polyethylene plastic refer to 6-mil plastic sheeting or polyethylene bags (or doubled bags if using 4-mil polyethylene bags), or any other thick plastic material shown to demonstrate at least equivalent performance. Plastic used to contain waste should be capable of completely containing the waste and, after being properly sealed, should remain leak-tight with no visible signs of discharge during movement or relocation.

Polyurethane: An exceptionally hard and wear-resistant coating created by the reaction of polyols with a multifunctional isocyanate; often used to seal wood floors following lead-based paint hazard control work and cleaning.

Precision: The degree to which a set of observations or measurements of the same property, usually obtained under similar conditions, conform to themselves; a data quality indicator. Precision is usually expressed in either absolute or relative terms as standard deviation, variance, or range. Often known as "reproducibility."

Primary prevention: The process of controlling lead hazards to prevent exposure *before* a child is poisoned. See Secondary prevention and Tertiary prevention.

Primary standard: A substance or device with a property or value that is unquestionably accepted, within specified limits, in establishing the value of the same or related property of another substance or device.

Public Housing Agency (PHA): Any State, county, municipality, or other government entity or public body, or agency or instrumentality thereof, authorized to engage or assist in the development or operation of housing for low-income families.

PVC: See Pigment Volume Concentration (PVC).

Quality Assurance (QA): An integrated system of activities involving planning, quality control, quality assessment, reporting, and quality improvement to ensure that a product or service meets defined standards of quality within a stated level of confidence.

Quality Control (QC): The overall system of technical activities whose purpose is to measure and control the quality of a product or service so that it meets the needs of users. The aim is to provide a level of quality that is satisfactory, adequate, dependable, and economical.

Random sample: A sample drawn from a population in a way that allows each member of the population to have an equal chance of being selected. Random sampling is a process used to identify locations for the lead-based paint inspections in multifamily dwellings. See also Targeted sample and Worst-case sample.

RCRA: See Resource Conservation and Recovery Act (RCRA).

Reevaluation: In lead hazard control work, the combination of a visual assessment and collection of environmental samples performed by a certified risk assessor to determine if a previously implemented lead-based paint hazard control measure is still effective and if the dwelling remains lead-safe.





Reference material: A material or substance that has at least one sufficiently well established property that can be used to calibrate an apparatus, assess a measurement method, or assign values to materials.

Reinspection: See Reevaluation.

Removal: See Paint removal.

Renovation: Work that involves construction and/or home or building improvement measures such as window replacement, weatherization, remodeling, and repainting.

Replacement: A strategy of abatement that entails the removal of building components coated with lead-based paint (such as windows, doors, and trim) and the installation of new components free of lead-based paint.

Representative sample: A sample of a universe or whole (e.g., waste sample pile, lagoon, groundwater, or waste stream) that can be expected to exhibit the average properties of the entire universe or whole.

Resident: A person who lives in a dwelling.

Resource Conservation and Recovery Act (RCRA): The primary Federal statute governing waste management from generation to disposal. RCRA defines the criteria for hazardous and nonhazardous waste.

Risk assessment: An onsite investigation of a residential dwelling to discover any lead-based paint hazards. Risk assessments include an investigation of the age, history, management, and maintenance of the dwelling, and the number of children under age 6 and women of childbearing age who are residents; a visual assessment; limited environmental sampling (i.e., collection of dust wipe samples, soil samples, and deteriorated paint samples); and preparation of a report identifying acceptable abatement and interim control strategies based on specific conditions.

Risk assessment screen: A type of risk assessment performed only in buildings in good condition using fewer samples but more stringent evaluation criteria (standards) to determine lead hazards.

Risk assessor: A certified individual who has completed training with an accredited training program and who has been certified to (1) perform risk assessments, (2) identify acceptable abatement and interim control strategies for reducing identified lead-based paint hazards, (3) perform clearance testing and reevaluations, and (4) document the successful completion of lead-based paint hazard control activities.

Sample site: A specific spot on a surface being tested for lead concentration.

Saponification: The chemical reaction between alkalies and oil that produces a type of soap. Because of saponification, oil and alkyd coatings will not adhere to masonry substrates, galvanized metals, or zinc-rich primers. Also a form of incompatibility between types of coatings.

Screen: See Risk assessment screen or Lead hazard screen.

Screening: The process of testing children to determine if they have elevated blood lead levels.

Secondary prevention: The process of identifying children who have elevated blood lead levels through screening and controlling or eliminating the sources of further exposure. See also Primary prevention and Tertiary prevention.

SEL: See Substrate Equivalent Lead (SEL).

Site: The land or body of water where a facility is located or an activity is conducted. The site includes adjacent land used in connection with the facility or activity.





Small-quantity generator: Owners, contractors (generators), or both who produce less than 100 kg of hazardous waste per month and accumulate less than 100 kg of hazardous waste at any one time, or who produce less than 1 kg of acutely hazardous waste per month and accumulate less than 1 kg of acutely hazardous waste at any one time.

Soil: See Bare soil.

Solid waste: As defined by RCRA, the term solid waste means garbage; refuse; sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility; or other discarded materials, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations or from community activities. The term does not include solid or dissolved material in domestic sewage or solid or dissolved material in irrigation return flows or industrial discharges (which are point sources subject to permits under the Clean Water Act), nor does the term include special nuclear or byproduct material as defined by the Atomic Energy Act of 1954.

Spectrum analyzer: A type of XRF analyzer that provides the operator with a plot of the energy and intensity, or counts of both K and L x-ray spectra, as well as a calculated lead concentration. See also XRF analyzer.

Spiked matrix: See Spiked sample.

Spiked sample: A sample prepared by adding a known mass of the target analyte (e.g., leaded dust) to a specific amount of matrix sample (e.g., one dust wipe) for which an independent estimate of the target analyte concentration is available. Spiked samples are used to determine, for example, the effect of the matrix on a method's recovery efficiency. See also Blind sample.

Spot-prime: To apply a paint primer to localized areas of exposed substrate.

Standard deviation: A measure of the precision of a reading; the spread of the deviation from the mean. The smaller the standard deviation, the more precise the analysis. The standard deviation is calculated by first obtaining the mean, or the arithmetic average, of all of the readings. A formula is then used to calculate how much the individual values vary from the mean—the standard deviation is the square root of the arithmetic average of the squares of the deviation from the mean. Many hand calculators have an automatic standard deviation function. See also Mean.

Standard reevaluation schedule (SRS): A schedule that determines the frequency that reevaluations should be performed on a property.

Standard reference material (SRM): A certified reference material produced by the National Institute of Standards and Technology (U.S. Department of Commerce) and characterized for absolute content independent of analytical method. See also Certified reference material.

Subsample: A representative portion of a sample. A subsample may be either a field sample or a laboratory sample. A subsample is often combined with other subsamples to produce a composite sample. See also Composite sample.

Substrate: A surface on which paint, varnish, or other coating has been applied or may be applied. Examples of substrates include wood, plaster, metal, and drywall.

Substrate effect: The radiation returned to an XRF analyzer by the paint, substrate, or underlying material, in addition to the radiation returned by any lead present. This radiation, when counted as lead x-rays by an XRF analyzer contributes to substrate equivalent lead (bias). The inspector may have to compensate for this effect when using XRF analyzers. See also XRF analyzer.





Substrate Equivalent Lead (SEL): The XRF measurement taken on an unpainted surface; used to calculate the corrected lead concentration on a surface by using the following formula: Apparent Lead Concentration—Substrate Equivalent Lead = Corrected Lead Concentration. See also Apparent Lead Concentration (ALC), Corrected Lead Concentration (CLC), and XRF analyzer.

Target housing: Any residential unit constructed before 1978, except dwellings that do not contain bedrooms or dwellings that were developed specifically for the elderly or persons with disabilities—unless a child younger than 6 resides or is expected to reside in the dwelling. In the case of jurisdictions that banned the sale or use of lead-based paint before 1978, the Secretary of HUD may designate an earlier date for defining target housing.

Targeted sample: A sample of dwelling units selected from an apartment building or housing development using information supplied by the owner. The units selected are likely to have the greatest probability of containing lead-based paint hazards. A targeted sample is usually selected for performing risk assessments in multifamily housing when it is not possible to select a worst-case sample. See also Worst-case sample and Random sample.

TCLP: See Toxicity Characteristic Leaching Procedure (TCLP).

Tertiary prevention: Providing medical treatment to children with elevated blood lead levels to prevent more serious injury or death.

Testing combination: A unique surface to be tested that is characterized by the room equivalent, component, substrate, and visible color.

Test location: A specific area on a testing combination where XRF instruments will test for lead-based paint.

Toxicity Characteristic Leaching Procedure (TCLP): A laboratory test to determine if excessive levels of lead or other hazardous materials could leach from a sample into groundwater; usually used to determine if waste is hazardous based on its toxicity characteristics.

Trained: Successful completion of a training course in a particular discipline. For lead hazard control work, the training course must be accredited by EPA or by an EPA-approved State program, pursuant to Title IV of the Toxic Substances Control Act.

Transporter: A person who transports hazardous waste, requiring a manifest under 40 CFR Part 260.10, within the United States by air, rail, highway, or water.

Treatment: In residential lead-based paint hazard control work, any method designed to control lead-based paint hazards. Treatment includes interim controls, abatement, and removal. Hazardous waste "treatment" is a method, technique, or process (such as neutralization) that is designed to change the physical, chemical, or biological character or composition of hazardous waste to neutralize it; render it nonhazardous or less hazardous; recover it; make it safer to transport, store, or dispose; or allow for easier recovery, storage, or volume reduction.

Treatment, Storage, and Disposal (TSD) facility: A facility licensed to handle hazardous waste.

Trisodium phosphate (TSP) detergent: A detergent that contains trisodium phosphate.

Trough: See Window trough.

Truck-mounted vacuum unit: A vacuum system whose components, except for hoses and attachments, are located outside the building undergoing dust removal. The exhaust is vented outside so that the interior dust is not disturbed.

TSD: See Treatment, Storage, and Disposal (TSD) facility.

TSP: See Trisodium phosphate (TSP) detergent.

 μ g (or ug): Micrograms. The prefix micromeans 1/1,000,000 (or one-millionth); a microgram is 1/1,000,000 of a gram and 1/1,000 of a milligram; equal to about 35/1,000,000,000 (35 billionths) of an ounce (an ounce is equal to 28,400,000 μ g).





Urethane-modified alkyd: An alkyd molecule that has been chemically modified by the incorporation of a urethane; a coating, often a varnish, that uses a urethane-modified alkyd resin in the binder.

Useful life: The life expectancy of a coating before it requires refinishing or some other form of maintenance.

VOC: See Volatile Organic Compound (VOC).

Volatile Organic Compound (VOC): Substances that vaporize or evaporate from a coating during the coating or curing process.

Walk-off mat: A washable, fibrous material (preferably with a rubber or vinyl backing) positioned at main entryways to reduce transport of lead dust and lead soil into a building or residence.

White lead: A white pigment, usually lead carbonate. See also Lead carbonate.

Window sill: See Interior window sill.

Window stool: See Interior window sill.

Window trough: For a typical double-hung window, the portion of the exterior window sill between the interior window sill (or stool) and the frame of the storm window. If there is no storm window, the window trough is the area that receives both the upper and lower window sashes when they are both lowered. Sometimes inaccurately called the window "well." See also Window well.

Window well: The space that provides exterior access and/or light to a window that is below grade, i.e., below the level of the surrounding earth or pavement. See also Window trough.

Worker: An individual who has completed training in an accredited program to perform lead-based paint hazard control in housing.

Worksite: Any interior or exterior area where lead-based paint hazard control work takes place.

Worksite preparation level: A set of measures designed to protect residents and the environment from leaded dust, paint chips, or other forms of lead contamination through the erection of barriers and the establishment of access control, resident relocation or movement restrictions, warning signs, ventilation, and other measures.

Worst-case sample: A sample of dwelling units having the greatest probability of containing lead-based paint hazards selected by a risk assessor on the basis of a visual examination of all dwelling units in a housing development or apartment building. See also Targeted sample and Random sample.

XRF analyzer: An instrument that determines lead concentration in milligrams per square centimeter (mg/cm²) using the principle of x-ray fluorescence (XRF). Two types of XRF analyzers are used—direct readers and spectrum analyzers. In these *Guidelines*, the term XRF analyzer only refers to portable instruments manufactured to analyze paint, and does not refer to laboratory-grade units or portable instruments designed to analyze soil.

Appendix 4

Inspector Certification



STATE OF CALIFORNIA DEPARTMENT OF PUBLIC HEALTH



LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:

CERTIFICATE TYPE:

NUMBER:

EXPIRATION DATE:

Lead Inspector/Assessor

LRC-00000459

5/31/2025

Lead Project Monitor

LRC-00000458

5/31/2025

Michelle Ehresman

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD

Appendix 5

CDPH 8552 Inspection Form

LEAD HAZARD EVALUATION REPORT

Section 1 — Date of Lead Hazard Evaluation 4/1/24							
Section 2 — Type of Lead Hazard Evaluation (C	heck o	ne box only)					
Lead Inspection Risk assessment Clearance Inspection Other (specify)							
Section 3 — Structure Where Lead Hazard Eval	uation	Was Conducted					
Address [number, street, apartment (if applicable)]		City		County	Zip Code		
331 The City Drive (Building 1)		Orange		Orange	92868		
Linknown	Type of structure Multi-unit building School or daycare Single family dwelling Other			Children living in structure? Yes No Don't Know			
Section 4 — Owner of Structure (if business/ag	ency, li	st contact person)					
Name		· · · · ·	Tele	phone number			
c/o Vanir Contruction (Scott Battles)				6-677-7024			
Address [number, street, apartment (if applicable)]		City		State	Zip Code		
4540 Duckhorn Drive, Suite 300		Sacramento		CA	95834		
Section 5 — Results of Lead Hazard Evaluation	(check	all that apply)					
No lead hazards detected Lead-contamina Section 6 — Individual Conducting Lead Hazard Name Michelle Ehresman Address [number, street, apartment (if applicable)] 7742 Arjons Drive CDPH certification number LRC 0459 Name and CDPH certification number of any other individ	d Evalu	City San Diego lature	Tele 85	Deteriorated lead-base ted soil found Other phone number 88-537-3999 State CA			
A. A foundation diagram or sketch of the structure is lead-based paint; B. Each testing method, device, and sampling product. All data collected, including quality control data,	edure u	ised;		·			
First copy and attachments retained by inspector Second copy and attachments retained by owner	Third copy only (no attachments) mailed or faxed to: California Department of Public Health Childhood Lead Poisoning Prevention Branch Reports 850 Marina Bay Parkway, Building P, Third Floor Richmond, CA 94804-6403 Fax: (510) 620-5656						

Appendix 6

Renovate Right



AUTION CAUTION

CAUTION

CAUTION

CAUTION







1-800-424-LEAD (5323) www.epa.gov/getleadsafe EPA-740-K-10-001 April 2010



Important lead hazard information for families, child care providers and schools.





IT'S THE LAW!

Federal law requires contractors that disturb painted surfaces in homes, child care facilities and schools, built before 1978 to be certified and follow specific work practices to prevent lead contamination. Always ask to see your contractor's certification.

Federal law requires that individuals receive certain information before renovating more than six square feet of painted surfaces in a room for interior projects or more than twenty square feet of painted surfaces for exterior projects or window replacement or demolition in housing, child care facilities and schools built before 1978.

- Homeowners and tenants: renovators must give you this pamphlet before starting work.
- Child care facilities, including preschools and kindergarten classrooms, and the families of children under six years of age that attend those facilities: renovators must provide a copy of this pamphlet to child care facilities and general renovation information to families whose children attend those facilities.



WHO SHOULD READ THIS PAMPHLET?

This pamphlet is for you if you:

- Reside in a home built before 1978.
- Own or operate a child care facility, including preschools and kindergarten classrooms, built before 1978, or
- Have a child under six years of age who attends a child care facility built before 1978.

You will learn:

- Basic facts about lead and your health.
- How to choose a contractor, if you are a property owner.
- What tenants, and parents/guardians of a child in a child care facility or school should consider.
- How to prepare for the renovation or repair job.
- What to look for during the job and after the job is done.
- Where to get more information about lead.

This pamphlet is not for:

- Abatement projects. Abatement is a set of activities aimed specifically at
 eliminating lead or lead hazards. EPA has regulations for certification and training of
 abatement professionals. If your goal is to eliminate lead or lead hazards, contact the
 National Lead Information Center at 1-800-424-LEAD (5323) for more information.
- "Do-it-yourself" projects. If you plan to do renovation work yourself, this document is a good start, but you will need more information to complete the work safely. Call the National Lead Information Center at 1-800-424-LEAD (5323) and ask for more information on how to work safely

in a home with lead-based paint.

Contractor education. Contractors
 who want information about working
 safely with lead should contact
 the National Lead Information
 Center at 1-800-424-LEAD (5323)
 for information about courses and
 resources on lead-safe work practices.



RENOVATING, REPAIRING, OR PAINTING?



- Is your home, your building, or the child care facility or school your children attend being renovated, repaired, or painted?
- Was your home, your building, or the child care facility or school where your children under six years of age attend built before 1978?

If the answer to these questions is YES, there are a few important things you need to know about lead-based paint.

This pamphlet provides basic facts about lead and information about lead safety when work is being done in your home, your building or the child care facility or school your children attend.

The Facts About Lead

- Lead can affect children's brains and developing nervous systems, causing reduced IQ, learning disabilities, and behavioral problems. Lead is also harmful to adults.
- Lead in dust is the most common way people are exposed to lead. People can also get lead in their bodies from lead in soil or paint chips. Lead dust is often invisible.
- Lead-based paint was used in more than 38 million homes until it was banned for residential use in 1978.
- Projects that disturb painted surfaces can create dust and endanger you and your family. Don't let this happen to you. Follow the practices described in this pamphlet to protect you and your family.

LEAD AND YOUR HEALTH

Lead is especially dangerous to children under six years of age.

Lead can affect children's brains and developing nervous systems, causing:

- Reduced IQ and learning disabilities.
- · Behavior problems.

Even children who appear healthy can have dangerous levels of lead in their bodies.

Lead is also harmful to adults. In adults, low levels of lead can pose many dangers, including:

- High blood pressure and hypertension.
- Pregnant women exposed to lead can transfer lead to their fetuses. Lead gets into the body when it is swallowed or inhaled.
- People, especially children, can swallow lead dust as they eat, play, and do other normal hand-to-mouth activities.
- People may also breathe in lead dust or fumes if they disturb lead-based paint.
 People who sand, scrape, burn, brush or blast or otherwise disturb lead-based paint risk unsafe exposure to lead.

What should I do if I am concerned about my family's exposure to lead?

- Call your local health department for advice on reducing and eliminating exposures to lead inside and outside your home, child care facility or school.
- Always use lead-safe work practices when renovation or repair will disturb painted surfaces.
- A blood test is the only way to find out if you or a family member already has lead poisoning. Call your doctor or local health department to arrange for a blood test.

For more information about the health effects of exposure to lead, visit the EPA lead website at www.epa.gov/lead/pubs/leadinfo.htm or call 1-800-424-LEAD (5323).

There are other things you can do to protect your family every day.

- Regularly clean floors, window sills, and other surfaces.
- Wash children's hands, bottles, pacifiers, and toys often.
- Make sure children eat a healthy, nutritious diet consistent with the USDA's dietary guidelines, that helps protect children from the effects of lead.
- Wipe off shoes before entering house.



WHERE DOES THE LEAD COME FROM?

Dust is the main problem.

The most common way to get lead in the body is from dust. Lead dust comes from deteriorating lead-based paint and lead-contaminated soil that gets tracked into your home. This dust may accumulate to unsafe levels. Then, normal hand to-mouth activities, like playing and eating (especially in young children), move that dust from surfaces like floors and window sills into the body.

Home renovation creates dust.

Common renovation activities like sanding, cutting, and demolition can create hazardous lead dust and chips.

Proper work practices protect you from the dust.

The key to protecting yourself and your family during a renovation, repair or painting job is to use lead-safe work practices such as containing dust inside the work area, using dust-minimizing work methods, and conducting a careful cleanup, as described in this pamphlet.

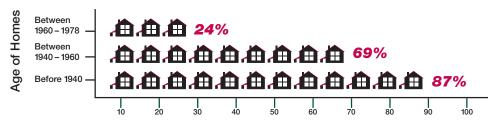
Other sources of lead.

Remember, lead can also come from outside soil, your water, or household items (such as lead-glazed pottery and lead crystal). Contact the National Lead Information Center at 1-800-424-LEAD (5323) for more information on these sources.



CHECKING YOUR HOME FOR LEAD-BASED PAINT

Percentage of Homes Likely to Contain Lead



Older homes, child care facilities, and schools are more likely to contain lead-based paint.

Homes may be single-family homes or apartments. They may be private, government-assisted, or public housing. Schools are preschools and kindergarten classrooms. They may be urban, suburban, or rural.

You have the following options:

You may decide to assume your home, child care facility, or school contains lead. Especially in older homes and buildings, you may simply want to assume lead-based paint is present and follow the lead-safe work practices described in this brochure during the renovation, repair, or painting job.

You can hire a certified professional to check for lead-based paint.

These professionals are certified risk assessors or inspectors, and can determine if your home has lead or lead hazards.

- A certified inspector or risk assessor can conduct an inspection telling you whether your home, or a portion of your home, has lead-based paint and where it is located. This will tell you the areas in your home where lead-safe work practices are needed.
- A certified risk assessor can conduct a risk assessment telling you if your home currently has any lead hazards from lead in paint, dust, or soil. The risk assessor can also tell you what actions to take to address any hazards.
- For help finding a certified risk assessor or inspector, call the National Lead Information Center at 1-800-424-LEAD (5323).

You may also have a certified renovator test the surfaces or components being disturbed for lead using a lead test kit. Test kits must be EPA-recognized and are available at hardware stores. They include detailed instructions for their use.

FOR PROPERTY OWNERS

You have the ultimate responsibility for the safety of your family, tenants, or children in your care.

This means properly preparing for the renovation and keeping persons out of the work area (see p. 8). It also means ensuring the contractor uses lead-safe work practices.

Federal law requires that contractors performing renovation, repair and painting projects that disturb painted surfaces in homes, child care facilities, and schools built before 1978 be certified and follow specific work practices to prevent lead contamination.

Make sure your contractor is certified, and can explain clearly the details of the job and how the contractor will minimize lead hazards during the work.

- You can verify that a contractor is certified by checking EPA's website at epa.gov/getleadsafe or by calling the National Lead Information Center at 1-800-424-LEAD (5323). You can also ask to see a copy of the contractor's firm certification.
- Ask if the contractor is trained to perform lead-safe work practices and to see a copy of their training certificate.
- Ask them what lead-safe methods they will use to set up and perform the job in your home, child care facility or school.
- Ask for references from at least three recent jobs involving homes built before 1978, and speak to each personally.

Always make sure the contract is clear about how the work will be set up, performed, and cleaned.

- Share the results of any previous lead tests with the contractor.
- You should specify in the contract that they follow the work practices described on pages 9 and 10 of this brochure.
- The contract should specify which parts of your home are part of the work area and specify which lead-safe work practices will be used in those areas. Remember, your contractor should confine dust and debris to the work area and should minimize spreading that dust to other areas of the home.
- The contract should also specify that the contractor will clean the work area, verify that it was cleaned adequately, and re-clean it if necessary.

If you think a worker is not doing what he is supposed to do or is doing something that is unsafe, you should:

- Direct the contractor to comply with regulatory and contract requirements.
- Call your local health or building department, or
- Call EPA's hotline 1-800-424-LEAD (5323).

If your property receives housing assistance from HUD (or a state or local agency that uses HUD funds), you must follow the requirements of HUD's Lead-Safe Housing Rule and the ones described in this pamphlet.

FOR TENANTS AND FAMILIES OF CHILDREN UNDER SIX YEARS OF AGE IN CHILD CARE FACILITIES AND SCHOOLS

You play an important role ensuring the ultimate safety of your family.

This means properly preparing for the renovation and staying out of the work area (see p. 8).

Federal law requires that contractors performing renovation, repair and painting projects that disturb painted surfaces in homes built before 1978 and in child care facilities and schools built before 1978, that a child under six years of age visits regularly, to be certified and follow specific work practices to prevent lead contamination.

The law requires anyone hired to renovate, repair, or do painting preparation work on a property built before

1978 to follow the steps described on pages 9 and 10 unless the area where the work will be done contains no lead-based paint.

If you think a worker is not doing what he is supposed to do or is doing something that is unsafe, you should:

- · Contact your landlord.
- · Call your local health or building department, or
- Call EPA's hotline 1-800-424-LEAD (5323).

If you are concerned about lead hazards left behind after the job is over, you can check the work yourself (see page 10).



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PREPARING FOR A RENOVATION

The work areas should not be accessible to occupants while the work occurs.

The rooms or areas where work is being done may need to be blocked off or sealed with plastic sheeting to contain any dust that is generated. Therefore, the contained area may not be available to you until the work in that room or area is complete, cleaned thoroughly, and the containment has been removed. Because you may not have access to some areas during the renovation, you should plan accordingly.

You may need:

- Alternative bedroom, bathroom, and kitchen arrangements if work is occurring in those areas of your home.
- A safe place for pets because they too can be poisoned by lead and can track lead dust into other areas of the home.
- A separate pathway for the contractor from the work area to the outside in order to bring materials in and out of the home. Ideally, it should not be through the same entrance that your family uses.
- A place to store your furniture. All furniture and belongings may have to be moved from the work area while the work is being done. Items that can't be moved, such as cabinets, should be wrapped in plastic.
- To turn off forced-air heating and air conditioning systems while the work is being done. This prevents dust from spreading through vents from the work area to the rest of your home. Consider how this may affect your living arrangements.

You may even want to move out of your home temporarily while all or part of the work is being done.

Child care facilities and schools may want to consider alternative accommodations for children and access to necessary facilities.



DURING THE WORK

Federal law requires contractors that are hired to perform renovation, repair and painting projects in homes, child care facilities, and schools built before 1978 that disturb painted surfaces to be certified and follow specific work practices to prevent lead contamination.

The work practices the contractor must follow include these three simple procedures, described below:

- 1. Contain the work area. The area must be contained so that dust and debris do not escape from that area. Warning signs must be put up and plastic or other impermeable material and tape must be used as appropriate to:
 - Cover the floors and any furniture that cannot be moved.
 - Seal off doors and heating and cooling system vents.

These will help prevent dust or debris from getting outside the work area.

2. Avoid renovation methods that generate large amounts of lead-contaminated dust.

Some methods generate so much lead-contaminated dust that their use is prohibited.

They are:

- · Open flame burning or torching.
- Sanding, grinding, planing, needle gunning, or blasting with power tools and equipment not equipped with a shroud and HEPA vacuum attachment.
- Using a heat gun at temperatures greater than 1100°F.

There is no way to eliminate dust, but some renovation methods make less dust than others. Contractors may choose to use various methods to minimize dust generation, including using water to mist areas before sanding or scraping; scoring paint before separating components; and prying and pulling apart components instead of breaking them.

- **3. Clean up thoroughly.** The work area should be cleaned up daily to keep it as clean as possible. When all the work is done, the area must be cleaned up using special cleaning methods before taking down any plastic that isolates the work area from the rest of the home. The special cleaning methods should include:
 - Using a HEPA vacuum to clean up dust and debris on all surfaces, followed by
 - Wet wiping and wet mopping with plenty of rinse water.

When the final cleaning is done, look around. There should be no dust, paint chips, or debris in the work area. If you see any dust, paint chips, or debris, the area must be re-cleaned.

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FOR PROPERTY OWNERS: AFTER THE WORK IS DONE

When all the work is finished, you will want to know if your home, child care facility, or school has been cleaned up properly. Here are some ways to check.

Ask about your contractor's final cleanup check. Remember, lead dust is often invisible to the naked eye. It may still be present even if you cannot see it. The contractor must use disposable cleaning cloths to wipe the floor of the work area and compare them to a cleaning verification card to determine if the work area was adequately cleaned.

To order a cleaning verification card and detailed instructions visit the EPA lead website at www.epa.gov/lead or contact the National Lead Information Center at 1-800-424-LEAD (5323) or visit their website at www.epa.gov/lead/nlic.htm.

You also may choose to have a lead-dust test. Lead-dust tests are wipe samples sent to a laboratory for analysis.

- You should specify in your contract that a lead-dust test will be done. In this case, make it clear who will do the testing.
- Testing should be done by a lead professional.

If you choose to do the testing, some EPA-recognized lead laboratories will send you a kit that allows you to collect samples and send them back to the lab for analysis.

Contact the National Lead Information Center at 1-800-424-LEAD (5323) for lists of qualified professionals and EPA-recognized lead labs.

If your home, child care facility, or school fails the dust test, the area should be re-cleaned and tested again.

Where the project is done by contract, it is a good idea to specify in the contract that the contractor is responsible for re-cleaning if the home, child care facility, or school fails the test.



FOR ADDITIONAL INFORMATION

You may need additional information on how to protect yourself and your children while a job is going on in your home, your building, or child care facility.

The National Lead Information Center at 1-800-424-LEAD (5323) or www.epa.gov/lead/nlic.htm can tell you how to contact your state, local, and/or tribal programs or get general information about lead poisoning prevention.

- State and tribal lead poisoning prevention or environmental protection programs can provide information about lead regulations
- and potential sources of financial aid for reducing lead hazards. If your state or local government has requirements more stringent than those described in this pamphlet, you must follow those requirements.
- Local building code officials can tell you the regulations that apply to the renovation work that you are planning.
- State, county, and local health departments can provide information about local programs, including assistance for lead-poisoned children and advice on ways to get your home checked for lead.

The National Lead Information Center can also provide a variety of resource materials, including the following guides to lead-safe work practices. Many of these materials are also available at www.epa.gov/lead/pubs/brochure.htm.

- Steps to Lead Safe Renovation, Repair and Painting.
- Protect Your Family from Lead in Your Home
- Lead in Your Home: A Parent's Reference Guide





For the hearing impaired, call the Federal Information Relay Service at 1-800-877-8339 to access any of the phone numbers in this brochure.

10 11

OTHER FEDERAL AGENCIES

EPA Regional Offices

EPA addresses residential lead hazards through several different regulations. EPA requires training and certification for conducting abatement and renovations, education about hazards associated with renovations, disclosure about known lead paint and lead hazards in housing, and sets lead-paint hazard standards.

Your Regional EPA Office can provide further information regarding lead safety and lead protection programs at **epa.gov/lead**.

Region 1

(Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island, Vermont) Regional Lead Contact U.S. EPA Region 1 Suite 1100 One Congress Street Boston, MA 02114-2023 (888) 372-7341

Region 2

(New Jersey, New York, Puerto Rico, Virgin Islands) Regional Lead Contact U.S. EPA Region 2 2890 Woodbridge Avenue Building 205, Mail Stop 225 Edison, NJ 08837-3679 (732) 321-6671

Region 3

(Delaware, Maryland, Pennsylvania, Virginia, Washington, DC, West Virginia) Regional Lead Contact U.S. EPA Region 3 1650 Arch Street Philadelphia, PA 19103-2029 (215) 814-5000

Region 4

(Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee) Regional Lead Contact U.S. EPA Region 4 61 Forsyth Street, SW Atlanta, GA 30303-8960 (404) 562-9900

Region 5

(Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin) Regional Lead Contact U.S. EPA Region 5 77 West Jackson Boulevard Chicago, IL 60604-3507 (312) 886-6003

Region 6

(Arkansas, Louisiana, New Mexico, Oklahoma, Texas) Regional Lead Contact U.S. EPA Region 6 1445 Ross Avenue, 12th Floor Dallas, TX 75202-2733 (214) 665-6444

Region 7

(Iowa, Kansas, Missouri, Nebraska) Regional Lead Contact U.S. EPA Region 7 901 N. 5th Street Kansas City, KS 66101 (913) 551-7003

Region 8

(Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming) Regional Lead Contact U.S. EPA Region 8 1595 Wynkoop Street Denver, CO 80202 (303) 312-6312

Region 9

(Arizona, California, Hawaii, Nevada) Regional Lead Contact U.S. Region 9 75 Hawthorne Street San Francisco, CA 94105 (415) 947-8021

Region 10

(Alaska, Idaho, Oregon, Washington) Regional Lead Contact U.S. EPA Region 10 1200 Sixth Avenue Seattle, WA 98101-1128 (206) 553-1200

CPSC

The Consumer Product Safety
Commission (CPSC) protects the public
from the unreasonable risk of injury or
death from 15,000 types of consumer
products under the agency's jurisdiction.
CPSC warns the public and private
sectors to reduce exposure to lead and
increase consumer awareness. Contact
CPSC for further information regarding
regulations and consumer product safety.

CPSC

4330 East West Highway Bethesda, MD 20814 Hotline 1-(800) 638-2772 www.cpsc.gov

CDC Childhood Lead Poisoning Prevention Branch

The Centers for Disease Control and Prevention (CDC) assists state and local childhood lead poisoning prevention programs to provide a scientific basis for policy decisions, and to ensure that health issues are addressed in decisions about housing and the environment. Contact CDC Childhood Lead Poisoning Prevention Program for additional materials and links on the topic of lead.

CDC Childhood Lead Poisoning Prevention Branch

4770 Buford Highway, MS F-40 Atlanta, GA 30341 (770) 488-3300 www.cdc.gov/nceh/lead

HUD Office of Healthy Homes and Lead Hazard Control

The Department of Housing and Urban Development (HUD) provides funds to state and local governments to develop cost-effective ways to reduce lead-based paint hazards in America's privately-owned low-income housing. In addition, the office enforces the rule on disclosure of known lead paint and lead hazards in housing, and HUD's lead safety regulations in HUD-assisted housing, provides public outreach and technical assistance, and conducts technical studies to help protect children and their families from health and safety hazards in the home. Contact the HUD Office of Healthy Homes and Lead Hazard Control for information on lead regulations, outreach efforts, and lead hazard control research and outreach grant programs.

U.S. Department of Housing and Urban Development

Office of Healthy Homes and Lead Hazard Control 451 Seventh Street, SW, Room 8236 Washington, DC 20410-3000 HUD's Lead Regulations Hotline (202) 402-7698 www.hud.gov/offices/lead/

12 13



SAMPLE PRE-RENOVATION FORM

This sample form may be used by renovation firms to document compliance with the Federal pre-renovation education and renovation, repair, and painting regulations.

Occupant Confirmation Pamphlet Receipt

□ I have received a copy of the lead hazard info potential risk of the lead hazard exposure fro dwelling unit. I received this pamphlet befor	om renovation activity to be performed in my
Printed Name of Owner-occupant	
Signature of Owner-occupant	Signature Date
Renovator's Self Certification Option (for tend Instructions to Renovator: If the lead hazard int signature was not obtainable, you may check t	formation pamphlet was delivered but a tenant
pamphlet to the rental dwelling unit listed b	faith effort to deliver the lead hazard information elow at the date and time indicated and that the of receipt. I further certify that I have left a copy nt.
was unavailable to sign the confirmation of r	ave made a good faith effort to deliver the lead lwelling unit listed below and that the occupant receipt. I further certify that I have left a copy of the door or by (fill in how pamphlet was left).
Printed Name of Person Certifying Delivery	Attempted Delivery Date
Signature of Person Certifying Lead Pamphlet	Delivery
Unit Address	

Note Regarding Mailing Option — As an alternative to delivery in person, you may mail the lead hazard information pamphlet to the owner and/or tenant. Pamphlet must be mailed at least seven days before renovation. Mailing must be documented by a certificate of mailing from the post office.

COMPREHENSIVE ASBESTOS SURVEY REPORT FOR DEMOLITION

PROJECT NAME:

ORANGE COUNTY JUVENILE HALL-BUILDING 2

PROJECT ADDRESS:

331 The City Drive, S. Orange, California 92868

Prepared for:

Mr. Scott L. Battles Vanir Construction Management, Inc 4540 Duckhorn Drive, Suite 300 Sacramento, California 95834

Prepared by:

MTGL, Inc. 7742 Arjons Dr. San Diego, California 92126 858-537-3999

Project Number:

SDPE-24-061.1CT

Report By:

Michelle Ehresman, CAC CAC Certification Number: 14-5323

CAC Expiration Date: November 19, 20204

Date of Report:

April 18, 2024

Version 1.0

TABLE OF CONTENTS

INTRODUCTIONSection 1
General Information
Project Information
Site/Building Description
Suspect Materials Observed
INVESTIGATION LIMITATIONS & WARRANTYSection 2
ASBESTOS SURVEY METHODOLOGYSection 3
General References
Visual Inspection
Homogeneous Material Classifications
Sampling Procedures
Laboratory Procedures
Method of Analysis
Laboratory Quality Control Program
ASBESTOS SURVEY OBSERVATIONS AND FINDINGS Section 4
Summary
Table 1: Positively Identified Materials that Contain Asbestos (ACM and ACCM) and Assessment of Material Condition.
Table 2: Materials found to be Negative for Asbestos
General Information
Environmental Protection Agency (EPA)
California Occupational Safety & Health Agency (Cal/OSHA)
National Emission Standards for Hazardous Air Pollutants (NESHAP)
CONCLUSIONS & RECOMMENDATIONS Section 5
APPENDICES Section 6
Appendix 1 – Asbestos Laboratory Results & Chain of Custodies
Appendix 2 – Site Map with Sample Location
Appendix 3 – Photo Documentation
Appendix 4 – Inspector Certifications

SECTION 1 INTRODUCTION

GENERAL INFORMATION

MTGL, Inc. was retained to conduct a survey for suspect asbestos containing materials. The intent of this survey is to pre-determine the presence of EPA/OSHA regulated Asbestos Containing Materials and Asbestos Containing Construction Materials (ACCM) that may need to be addressed prior to scheduled demolition and/or renovation activities.

Buildings 2, 5, 7 and 9 shared the same homogeneous silver rolled roofing system and black roofing mastic. Samples collected were representative of the shared roofing materials.

MTGL's scope of work was limited to the following:

- Review of project drawings.
- Conduct a pre-construction asbestos inspection limited to Client specified locations in accordance with NESHAP Regulations and the collection of bulk samples of suspect ACM.
- Submit samples to a NVLAP accredited laboratory for analysis of asbestos fiber content using polarized-light microscopy.
- Prepare report with material description, sampling locations, analytical results, and recommendations for proper handling/abatement prior to demolition and/or renovation activities.

PROJECT INFORMATION

Survey Requested/Authorized By: Mr. Scott L. Battles

Type of Survey Requested: Limited (Restricted to Client Specified Locations Only)

Destructive Sampling Allowed by Client: Yes

Project Name: ORANGE COUNTY JUVENILE HALL BUILDING 5 (ROOMS 19-20)

Project Address: 331 The City of Orange Dr. S in the city of Orange in the State of California.

Date of Inspection: April 1, 2024 to April 2, 2024

AHERA Certified Building Inspector Name: Darla Beery

AHERA Certified Building Inspector Number: 2023ABCA171101

Additional AHERA Certified Building Inspector Name: Michelle Ehresman

Additional AHERA Certified Building Inspector Number: ABIR0727230010N35227

Local Air District: South Coast Air Quality Management District (Sampling method, lab

qualifications, lab analytical procedures, and lab method of analysis were

performed in compliance with Rule 1403 (d)(1)(A) and 40 CFR Part 763 - Asbestos. requirments)

Laboratory: EMLab P&K, LLC – ID#: 3592267/3609732

9445 Farnham St, Suite 103, San Diego, CA 92123

(866) 888-6653 Fax (623) 780-7695 www.emlab.com

Laboratory Sample Analysis Method: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA

METHOD 600/R-93-116, SOP EM-AS-S-1267)

Sampling Protocols: EPA 40CFR 763.86 Methods

SITE/BUILDING DESCRIPTION

Structure Type: Commercial Facility

Year Built: Unknown

Date of known additions: Unknown

Building Structural Damage (If Any): None Observed

Approximate Square Feet of Surveyed Area: 12,000

Structure Frame: Wood

If other, describe: None

Structure Foundation: Concrete Slab On Grade

If other, describe: None

Number of Floors: 1

Building Occupied: Yes

SUSPECT MATERIALS OBSERVED

Suspect Materials Observed During the Asbestos Survey Conducted

- Fissured ceiling tile (2'x4')
- Fiberglass insulation
- Epoxy floor
- Stone & mortar(fireplace)
- Pipe insulation w/wrap
- Ceramic tile w/mortar (wall)
- Ceramic tile w/mortar (floor)
- Concrete block/
- Concrete ceiling
- Carpet adhesive
- Cove base mastic
- Wall plaster
- Fire safety board
- Concrete floor/ Concrete slab
- Window putty

- Exterior brick and mortar
- Exterior concrete block
- HVAC seam caulk
- Rolled roofing and mastic
- Vinyl Cap Shet

Inaccessible Materials Presumed to be Asbestos Content:

• None

SECTION 2 INVESTIGATION LIMITATIONS & WARRANTY

Per the agreement between The Client and MTGL, Inc., the scope of services was performed as described in this report.

The intent of this survey is to pre-determine the presence of EPA/OSHA regulated asbestos containing building materials that may need to be addressed prior to scheduled demolition and/or renovation activities.

INVESTIGATION LIMITATIONS

MTGL, Inc. did not conduct testing within interstitial wall cavities, ceiling plenums, HVAC ventilation systems or crawlspaces or other locations of the facility, outside of the Client specified areas.

The findings of this report are valid as of the date of the survey and sample collection. Changes in the condition of the property can occur with passage of time, whether they are due to natural processes or the works of man on this or adjacent properties. In addition, changes in the state-of-art technology and/or government codes may occur. Due to such changes, the findings of this report may be invalidated wholly or in part by conditions beyond our control. Due to changes that can occur over time, submittals of this report to Regulatory Agencies may require additional site visits and assessment to document current conditions.

The final assessment of the potential for the existence of hazardous contaminants at the site should be considered a professional opinion based on the data obtained during the investigation and should not be considered a definitive statement that a hazardous contaminant or conditions are, or is not, present in the area of study. These opinions have been derived in accordance with current standards of practice.

This report is intended solely for use by the parties to whom it is addressed. This report is not intended for and may not contain sufficient information for purposes other than qualitative evaluation of asbestos or conditions at the time of our evaluation. Reliance on this report for other purposes or by other parties shall be at the user's sole risk.

WARRANTY

MTGL, Inc. warrants that the findings contained herein have been prepared with the level of care and skill exercised by experienced and knowledgeable environmental consultants who are appropriately licensed or otherwise trained to perform asbestos inspections and assessments pursuant to the scope of work required on this project. MTGL's Asbestos Survey Reports are prepared by trained certified professionals without a conflict of interest in the demolition(s) or renovation project(s) as per the Business and Professions Code 7180 (BP7180).

MTGL, Inc. warrants that the findings contained herein have been prepared in general accordance with accepted professional practices as applied by similar professionals in the community at the time of its preparation. Changes in the state of the art or in applicable regulations cannot be anticipated and have not been addressed in this report.

The survey included inspection of visible and accessible materials. MTGL did not inspect or sample inaccessible areas and did not dismantle any part of the structure to survey inaccessible areas. For the purpose of this warranty, inaccessible is defined as areas that could not be tested (sampled) without destruction of the structure or a portion of the structure. Inaccessible materials that are visible to MTGL's inspectors shall be assumed to be asbestos containing. No other warranty is expressed, or implied.

SECTION 3 ASBESTOS SURVEY METHODOLOGY

GENERAL REFERENCES

The asbestos survey consisted of two major activities: visual inspection and sampling. Although these activities are listed separately, they are integrated tasks.

VISUAL INSPECTION

The visual inspection was performed by an AHERA Certified Building Inspector under the direction of a California Certified Asbestos Consultant. An initial building walkthrough was conducted to determine the presence of suspect materials that were accessible or exposed. Materials that were similar in general appearance were grouped into homogeneous sampling areas.

HOMOGENEOUS MATERIAL CLASSIFICATIONS

A preliminary walkthrough of the building was conducted to determine areas of materials that were visually similar in color, texture, and general appearance and that appeared to have been installed at the same time. Such materials are termed "homogeneous materials" by the EPA. During this walkthrough, the approximate locations of these homogeneous materials were noted. Only materials that were accessible or exposed and suspected to contain asbestos were identified.

Following the EPA protocols, each identified suspect homogeneous material is placed in one of the following EPA classifications:

- Surfacing Materials (spray or trowel applied materials)
- Thermal System Insulation (materials applied to various mechanical systems)
- Miscellaneous Materials (any material which do not fit either of the above categories, such as floor tiles, etc.)

SAMPLING PROCEDURES

Following the walkthrough, the inspector collected selected samples of exposed or accessible materials identified as suspect material. Sampling was limited to accessible materials not involving destruction of walls, other building elements, physical barriers, or the structural integrity of the item being tested.

EPA guidelines were used to determine the sampling protocol. Sampling locations that were chosen to be representative of the homogeneous sampling area. While an effort was made to collect samples randomly, samples were taken preferentially from damaged areas or areas which were the least visible to minimize disturbance of the material.

Samples of surfacing material were collected in general accordance with the EPA random sampling protocol outlined in the EPA publication, "Asbestos in Buildings: Simplified Sampling Scheme for Friable Surfacing Materials" (EPA 560/5-85-030a, October 1985).

Samples of miscellaneous materials were also taken as randomly as possible, while attempting to sample already damaged areas so as to minimize disturbance of the material.

A minimum of three samples were collected of each homogeneous material. Depending on the quantity of homogeneous material, additional samples may be collected to avoid the possibility of false negative results.

LABORATORY PROCEDURES

Method of Analysis

Analysis was performed by visually observing the bulk sample and preparing slides for microscopic examination and identification. The samples were mounted on slides and then analyzed for asbestos (chrysotile, amosite, crocidolite, anthophyllite, and actinolite/tremolite), fibrous non-asbestos constituents (mineral wool, paper, etc.) and nonfibrous constituents. Asbestos was identified by refractive indices, morphology, color, pleochroism, birefringence, extinction characteristics, and signs of elongation. The same characteristics were used to identify the non-asbestos constituents.

The microscopist used a stereoscope to visually estimate relative amounts of each constituent using a stereoscope to determine the volume of each constituent in proportion to the total volume of the sample.

All bulk samples were analyzed by Polarized Light Microscopy (PLM) with dispersion staining as described by the Interim Method of the Determination of Asbestos in Bulk Insulation, Federal Register, 40 CFR Ch. 1 Pt. 763, App. A to Subpart. F, July 1, 1987. This is a standard method of analysis in optical mineralogy and the currently accepted method for the determination of asbestos in bulk samples. A suspect material is immersed in a solution of known refractive index and subjected to illumination by polarized light. The characteristic color displays that result enable mineral identification. It should be noted that some ACM may not be accurately identified or quantified by PLM. As an example, the original fabrication of vinyl floor tiles routinely involved milling of asbestos fibers to extremely small sizes. As a result, these fibers may go undetected under the standard polarized light microscopy method. Transmission Electron Microscopy (TEM) is recommended for a more definitive analysis of these materials. MTGL, Inc. has no control over how the laboratory describes materials or layers of materials being analyzed. Although a minimum of three samples are collected of suspect building materials, first positive stops may be requested of the laboratory and the results of the one positive sample will be reported. All other homogeneous materials will be assumed to be positive for asbestos content.

Laboratory Quality Control Program

MTGL, Inc. only uses laboratories that maintain an in-house quality control program. This program involves blind reanalysis of ten percent of all samples, precision and accuracy controls, and use of standard bulk reference materials.

SECTION 4 ASBESTOS OBSERVATIONS AND FINDINGS

SUMMARY

Table 1: Positively Identified Materials that Contain Asbestos (ACM and ACCM) and Assessment of Material Condition (as of the date the survey was conducted). Laboratory Results can be found in Appendix 1.

Material* Description	Location*	Sample #	Approximate Quantity**	AHERA Rank***	Friability/ Material Type	Damage Category	Quantity of Contamination (If any) **	Asbestos Content
Roof Mastic (See below note.)	Building 2 (Under Vinyl Cap Sheet on North End)	R-14	1,800	X	Non-Friable	1	None	4%

Note: Sample R14 (roof mastic) pertains only to the <u>North end of Building 2</u> under vinyl cap sheet. Sample is included with report as it is a part of the same Chain of Custody (COC) and lab report as the remainder of the samples for Bldgs. 2, 5, 7 and 9.

*Positively identified ACM and ACCM that are similar in color and texture in other locations throughout the structure and facility shall be considered as asbestos containing until further sampling/analysis determines otherwise. In the event suspect asbestos containing materials are discovered during maintenance, renovation and/or demolition that are not identified in this report, disturbance of the materials should be stopped until further assessment of the material for asbestos content can be conducted.

**MTGL, Inc. is not responsible for actual quantity of the material(s). MTGL recommends bidding contractors measure and calculate quantities for estimated abatement costs and notifications. (sf= square foot; NA= not applicable))

***Each homogeneous area of friable and non-friable asbestos-containing material (ACM) was classified into one of the following seven categories, as specified in EPA's AHERA regulations (40 CFR 763.88):

- (1) Damaged or significantly damaged thermal system insulation ACM.
- (2) Damaged friable surfacing ACM.
- (3) Significantly damaged friable surfacing ACM.
- (4) Damaged or significantly damaged friable miscellaneous ACM.
- (5) ACBM with potential for damage.
- (6) ACBM with potential for significant damage.
- (7) Any remaining friable ACBM or friable suspected ACBM.
- (X) Not applicable (material is non-friable surfacing or miscellaneous material).

The damage categories are defined as follows:

Category 1 - "Undamaged" means the material had no visible damage, or extremely minor damage or surface marring (i.e., a room full of floor tile with only two or three small corners chipped off on the tile).

Category 2 - "Damaged" means the material had visible damage evenly distributed over less than 10% of its surface, or localized over less than 25% of its surface.

Category 3 -"Significantly Damaged" means the material had visible damage that is evenly distributed over 10% or more of its surface, or localized over 25% or more if its surface.

Table 2: Materials found to be Negative for Asbestos (as of the date the survey was conducted). Laboratory results can be found in Appendix 1.

Material* Description	Sample #
Fiberglass insulation	1,2,3
Fissured ceiling tile	4,5,6
Epoxy flooring	7,8,9
Carpet adhesive	10,11,12
Ceramic tile & mortar	13,14,15,16,17,18,40,41,42
Wall plaster	19,20,21
Pipe insulation	22,23,24
Cove base mastic	25,26,27
Concrete block	28,29,30
Stone & mortar	31,32,33
Concrete floor	34,35,36
Fire safety board	37,38,39
Window putty	43,44,45
Brick & mortar	46,47,48
Concrete slab	49,50,51
Concrete block	52,53,54
Samples R-1 through R-13 are Homogeneous to the shared roofing systems for Building 2, 5, 7 and 9.	
Silver Rolled Roofing over Insulation	R-1, R2, R3, R-4, R-5
Roof Mastic	R-6, R-7, R-8, R-9, R-10
HVAC Caulk	R-11. R12, R-13

GENERAL INFORMATION

Environmental Protection Agency (EPA)

According to the South Coast Air Quality Management District's Rule 1402 paragraph (H)(2)(C), the analysis of composite samples of multi-layered material including, but not limited to, stucco (base and scratch coat) and wall systems is prohibited for the quantification of asbestos content. All separable layers shall be analyzed and reported separately for asbestos content.

These materials are eligible for analyzed using 1,000 Point Count with Gravimetric Reduction methods. Analysis would be conducted per strata and materials found to be greater than 0.1% asbestos are regulated by OSHA and handled as asbestos containing until packaged and stored for disposal. Materials greater than 1% are regulated by EPA/APCD and would require disposal as asbestos containing material.

A material is considered by the EPA and the State of California to be asbestos-containing if at least one sample collected from the area shows asbestos present in an amount greater than one percent (>1%).

California Occupational Safety & Health Agency (Cal/OSHA)

Title 8, California Code of Regulation 1529 defines asbestos-containing construction materials as materials containing greater than one-tenth of one percent (0.1%) asbestos by weight. Under this code, materials containing between 0.1% and 1% asbestos are regulated as other regulated operations. Although operations involving materials containing between 0.1% and 1% asbestos are not considered Class I, II, or III work, several sections of the standard are applicable, including negative exposure assessments and the use of regulated areas.

Laboratory analysis may report materials as "Trace Asbestos". These materials are assumed to be greater than 0.1%. Upon client request, these materials can be analyzed using 1,000 Point Count with Gravimetric Reduction methods. Materials found to be greater than 0.1% asbestos are regulated by OSHA and handled as asbestos containing until packaged and stored for disposal.

Please refer to the laboratory analysis for a more detailed description of the microscopic analysis of these samples.

Asbestos-containing materials (ACM) are regulated by federal, state, and local agencies, which include but may not be limited to the following:

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) requires an inspection for asbestos be done on facilities that are to undergo demolition or renovation work. Materials found to contain asbestos may need to be removed prior to the start of such demolition/renovation work.

NESHAP defines Category I non-friable asbestos-containing materials as gaskets, resilient floor covering, and asphalt roofing products that contain more than one percent asbestos, and Category II non-friable as any materials, except for Category I non-friable, that contain more than one percent asbestos and cannot be reduced to a powder by hand pressure when dry. NESHAP defines a Regulated Asbestos-Containing Material (RACM) as: (a) friable ACM, (b) Category I non-friable that has become friable, (c) Category I non-friable that has or may be subject to sanding, grinding, cutting, or abrading, and (d) Category II non-friable that may or has become friable during demolition or renovation.

SECTION 5 CONCLUSIONS & RECOMMENDATIONS

CONCLUSIONS

On this asbestos survey, materials observed and tested for asbestos were positive for asbestos content.

While the silver coated rolled roofing and roofing mastic is negative for asbestos on Building 2, sample R14 (roof mastic) pertains only to North end of Building 2 under vinyl cap sheet. The sample is a part of the same Chain of Custody (COC) and lab report as the remainder of the samples for Buildings 2, 5, 7 and 9.

RECOMMENDATIONS

If during renovation/demolition activities, materials other than the ones discussed in this report are observed, the materials should be tested for asbestos content prior to disturbance.

General

MTGL recommends that all asbestos containing materials be removed prior to any renovation and/or demolition activities, which may impact the materials. A Licensed Abatement Contractor in the State of California should perform the removal activities.

Removal of ACM/ACCM should be conducted in accordance with EPA and OSHA requirements for Federal, State and Local rules and regulations. All asbestos removal should be conducted using wet methods and engineering controls to reduce airborne fiber concentrations. OSHA required personal protective equipment must be used for worker protection.

All activities that may disturb or disrupt asbestos containing material must be conducted in properly demarcated regulated areas using wet removal methods.

Proper decontamination methods must be used by all workers entering and leaving regulated work areas where asbestos containing materials are being removed.

In the event ACM or ACCM materials are observed to be damaged and/or visible contamination is present, isolate the immediate area, turn off HVAC systems. Only properly trained and certified workers may enter the work area to conducted clean-up activities using wet methods.

If renovation and/or demolition activities do not impact the asbestos containing materials, then the materials can be managed in place. Periodic surveillance is recommended. An Operations & Maintenance (O&M) program should be established and conducted by properly trained personnel. Minimum training for each type of material that has been identified should be given as required by Cal/OSHA. Additionally, postings would be required in all publicly accessible areas warning of the potential hazard to satisfy the Proposition 65 & Hazard Communication regulations.

SECTION 6 APPENDICES

APPENDIX 1 ASBESTOS LABORATORY RESULTS & CHAIN OF CUSTODY



Report for:

Mr. Carl Tucker MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126

Eurofins EPK Built Environment Testing, LLC Project: Vanir Const. - OC Juvenile Hall; 331 The City of Orange B2 Regarding:

EMĹ ID: 3592267

Approved by:

Dates of Analysis:

Asbestos PLM: 04-03-2024 and 04-04-2024

EMLab ID: 3592267, Page 1 of 15

Approved Signatory Roshanak Kalantari

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267) NVLAP Lab Code 200945-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

1010 N Central Avenue, Suite 460, Glendale, CA 91202

(800) 651-4802 www.eurofinsus.com/Built

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B2

Date of Sampling: 03-29-2024 Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Total Samples Submitted: Total Samples Analyzed: 54 **Total Samples with Layer Asbestos Content > 1%:** 0

Lab ID-Version 1: 17567486-1

Lab ID-Version 1: 17567487-1

Lab ID-Version 1: 17567488-1

EMLab ID: 3592267, Page 2 of 15

Location: 1. Fiberglass Insulation

	<u> </u>
Sample Layers	Asbestos Content
Yellow Insulation	ND
Composite Non-Asbestos Content:	95% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 2. Fiberglass Insulation

	•
Sample Layers	Asbestos Content
Yellow Insulation	ND
Composite Non-Asbestos Content:	95% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 3, Fiberglass Insulation

Sample Layers	Asbestos Content
Yellow Insulation	ND
Composite Non-Asbestos Content:	95% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 4. Fissured Ceiling Tile

Location: 4, Fissured Ceiling Tile	Lab ID-Version‡: 17567489-1
Sample Layers	Asbestos Content
Gray Ceiling Tile with White Surface	< 1% Amosite
Composite Non-Asbestos Content:	60% Glass Fibers
Sample Composite Homogeneity:	Good

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

Lab ID-Version‡: 17567490-1

Lab ID-Version : 17567492-1

Lab ID-Version 1: 17567493-1

EMLab ID: 3592267, Page 3 of 15

1010 N Central Avenue, Suite 460, Glendale, CA 91202 (800) 651-4802 www.eurofinsus.com/Built

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B2

Date of Sampling: 03-29-2024 Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 5, Fissured Ceiling Tile

Sample Layers	Asbestos Content
Brown Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	40% Glass Fibers
_	20% Cellulose
Sample Composite Homogeneity:	Good

Location: 6. Fissured Ceiling Tile

Location: 6, Fissured Ceiling Tile	Lab ID-Version‡: 17567491-1
Sample Layers	Asbestos Content
Brown Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	40% Glass Fibers
-	20% Cellulose
Sample Composite Homogeneity:	Good

Location: 7, Apoxy Flooring

Sample Layers	Asbestos Content
Brown Flooring	ND
Sample Composite Homogeneity:	Moderate

Location: 8. Apoxy Flooring

Location, o, ripony ricoring	***
Sample Layers	Asbestos Content
Brown Flooring	ND
Sample Composite Homogeneity: Moderate	

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Lab ID-Version 1: 17567496-1

Lab ID-Version †: 17567497-1

EMLab ID: 3592267, Page 4 of 15

Client: MTGL, Inc. C/O: Mr. Carl Tucker Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B2

Date of Sampling: 03-29-2024 Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 9, Apoxy Flooring Lab ID-Version : 17567494-1

Sample Layers	Asbestos Content
Brown Flooring	ND
Sample Composite Homogeneity: Moderate	

Location: 10, Carpet Adhesive	Lab ID-Version‡: 17567495-1
Sample Layers	Asbestos Content
Tan Adhesive	ND
Sample Composite Homogeneity:	Good

Location: 11, Carpet Adhesive

Sample Layers	Asbestos Content
Tan Adhesive	ND
Sample Composite Homogeneity:	Good

Location: 12 Carnet Adhesive

Location: 12, Carpet Addictive	Eur 15 (cision ₄ , 1750/15/11
Sample Layers	Asbestos Content
Tan Adhesive	ND
Sample Composite Homogeneity:	Good

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Lab ID-Version‡: 17567498-1

Lab ID-Version 1: 17567499-1

Lab ID-Version 17567500-1

Lab ID-Version : 17567501-1

EMLab ID: 3592267, Page 5 of 15

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B2

Date of Sampling: 03-29-2024 Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 13, Ceramic Tile and Mortar

Sample Layers	Asbestos Content
Multicolored Mortar	ND
Pink Ceramic Tile	ND
Transparent Adhesive	ND
Sample Composite Homogeneity:	Moderate

Location: 14. Ceramic Tile and Mortar

Sample Layers	Asbestos Content
Gray Mortar	ND
Pink Ceramic Tile	ND
Sample Composite Homogeneity: Moderate	

Location: 15, Ceramic Tile and Mortar

Sample Layers	Asbestos Content
Gray Mortar	ND
Yellow Ceramic Tile	ND
Sample Composite Homogeneity: Moderate	

Location: 16, 2'x2' Ceramic Tile and Grout

Sample Layers	Asbestos Content
Brown Grout	ND
Beige Ceramic Tile	ND
Sample Composite Homogeneity:	Moderate

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Lab ID-Version‡: 17567502-1

Lab ID-Version 1: 17567503-1

Lab ID-Version †: 17567504-1

Lab ID-Version 1: 17567505-1

EMLab ID: 3592267, Page 6 of 15

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Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B2

Date of Sampling: 03-29-2024 Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 17, 2'x2' Ceramic Tile and Grout

Sample Layers	Asbestos Content
Brown Grout	ND
Beige Ceramic Tile	ND
Sample Composite Homogeneity: Moderate	

Location: 18, 2'x2' Ceramic Tile and Grout

	·
Sample Layers	Asbestos Content
Brown Grout	ND
Beige Ceramic Tile	ND
Sample Composite Homogeneity: Moderate	

Location: 19. Wall Plaster

Location: 19, wan i laster	Euo 15 Version ₄ . 17507504 1
Sample Layers	Asbestos Content
White Compound 2	ND
Cream Tape	ND
White Compound 1	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 20. Wall Plaster

Zocation 20, 11 and 1 asset	
Sample Layers	Asbestos Content
White Compound 2	ND
Cream Tape	ND
White Compound 1	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

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Lab ID Varsion + 17567500 1

EMLab ID: 3592267, Page 7 of 15

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B2

Date of Sampling: 03-29-2024 Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 21. Wall Plaster

Location: 21, Wall Plaster	Lab ID-Version‡: 17567506-1
Sample Layers	Asbestos Content
White Compound 2	ND
Cream Tape	ND
White Compound 1	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 22. Pipe Insulation

on: 22, Pipe Insulation	Lab ID-Version‡: 17567507-1
Sample Layers	Asbestos Content
Yellow Insulation with Silver Backing	ND
Composite Non-Asbestos Content:	85% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 23, Pipe Insulation	Lab ID-Version‡: 17567508-1
Sample Layers	Asbestos Content
Yellow Insulation with Silver Backing	ND
Composite Non-Asbestos Content:	85% Glass Fibers
Sample Composite Homogeneity:	Good

Location, 24 Ding Inculation

Location: 24, Pipe insulation	Lao ID- version ₄ : 1/30/309-1
Sample Layers	Asbestos Content
Yellow Insulation with Silver Backing	ND
Composite Non-Asbestos Content:	85% Glass Fibers
Sample Composite Homogeneity:	Good

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Lab ID-Version‡: 17567510-1

Lab ID-Version : 17567511-1

Lab ID-Version : 17567512-1

Lab ID-Version †: 17567513-1

EMLab ID: 3592267, Page 8 of 15

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B2

Date of Sampling: 03-29-2024 Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 25, Cove Base Mastic

Sample Layers	Asbestos Content
Beige Mastic	ND
Sample Composite Homogeneity:	Good

Location: 26, Cove Base Mastic

Sample Layers	Asbestos Content
Beige Mastic	ND
Sample Composite Homogeneity:	Good

Location: 27, Cove Base Mastic

Sample Layers	Asbestos Content
Beige Mastic	ND
Sample Composite Homogeneity:	Good

Location: 28 Concrete Block

Location: 20, Concrete Block	240 ID (CISION). 17507515 I
Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

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EMLab ID: 3592267, Page 9 of 15

Client: MTGL, Inc. C/O: Mr. Carl Tucker Date of Sampling: 03-29-2024 Re: Vanir Const. - OC Juvenile Hall; 331 The City of Date of Receipt: 03-30-2024

Orange B2 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 29, Concrete Block Lab ID-Version : 17567514-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 30, Concrete Block Lab ID-Version 1: 17567515-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 31, Stone and Mortar Lab ID-Version 1: 17567516-1

Sample Layers	Asbestos Content
Gray Mortar	ND
Beige Tile	ND
Sample Composite Homogeneity: Moderate	

Location: 32, Stone and Mortar Lab ID-Version : 17567517-1

Sample Layers	Asbestos Content
Gray Mortar	ND
Beige Tile	ND
Sample Composite Homogeneity: Moderate	

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Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B2

Date of Sampling: 03-29-2024 Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 33. Stone and Mortar

Location: 33, Stone and Mortar	Lab ID-Version‡: 17567518-1
Sample Layers	Asbestos Content
Gray Mortar	ND
Beige Tile	ND
Sample Composite Homogeneity:	Moderate

Location: 34, Concrete Floor Lab ID-Version 1: 17567519-1

Sample Layers	Asbestos Content
Brown Concrete	ND
Sample Composite Homogeneity:	Good

Location: 35, Concrete Floor Lab ID-Version 1: 17567520-1

Sample Layers	Asbestos Content
Brown Concrete	ND
Sample Composite Homogeneity:	Good

Location: 36, Concrete Floor Lab ID-Version : 17567521-1

Sample Layers	Asbestos Content
Brown Concrete	ND
Sample Composite Homogeneity:	Good

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Lab ID-Version t: 17567522-1

Lab ID-Version 17567524-1

Lab ID-Version 1: 17567525-1

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B2

Date of Sampling: 03-29-2024 Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 37. Fire Safety Board

Location: 37,1 ne Salety Board	240 15 (0151014, 17007022 1
Sample Layers	Asbestos Content
Beige Mastic	ND
White Fiberglass Reinforced Plastic	ND
Composite Non-Asbestos Content:	15% Glass Fibers
Sample Composite Homogeneity	Moderate

Location: 38, Fire Safety Board	Lab ID-Version‡: 17567523-1
Sample Layers	Asbestos Content
Beige Mastic	ND
White Fiberglass Reinforced Plastic	ND
Composite Non-Asbestos Content:	15% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 39. Fire Safety Board

Sample Layers	Asbestos Content
Beige Mastic	ND
White Fiberglass Reinforced Plastic	ND
Composite Non-Asbestos Content:	15% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 40, 1"x1" Ceramic Tile and Mortar

	·
Sample Layers	Asbestos Content
Gray Mortar	ND
Red Ceramic Tile	ND
Sample Composite Homogeneity:	Moderate

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Lab ID-Version‡: 17567526-1

Lab ID-Version 1: 17567527-1

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B2

Date of Sampling: 03-29-2024 Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 41, 1"x1" Ceramic Tile and Mortar

Sample Layers	Asbestos Content
Gray Mortar	ND
Red Ceramic Tile	ND
Sample Composite Homogeneity: Moderate	

Location: 42. 1"x1" Ceramic Tile and Mortar

	•
Sample Layers	Asbestos Content
Gray Mortar	ND
Red Ceramic Tile	ND
Sample Composite Homogeneity: Moderate	

Location: 43. Window Putty

Location: 43, Window Putty	Lab ID-Version‡: 17567528-1
Sample Layers	Asbestos Content
Black Window Putty	ND
Sample Composite Homogeneity:	Good

Location: 44. Window Putty

Location: 44, Window Putty	Lab ID-Version‡: 17567529-1
Sample Layers	Asbestos Content
Black Window Putty	ND
Sample Composite Homogeneity:	Good

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Client: MTGL, Inc. C/O: Mr. Carl Tucker

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Orange B2

Date of Sampling: 03-29-2024 Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 45, Window Putty Lab ID-Version‡: 17567530-1

Sample Layers	Asbestos Content
Black Window Putty	ND
Sample Composite Homogeneity:	Good

Location: 46, Brick and Mortar	Lab ID-Version‡: 17567531-1
Sample Layers	Asbestos Content
Gray Mortar	ND
Red Brick	ND
Sample Composite Homogeneity:	Moderate

Location: 47, Brick and Mortar	Lab ID-Version‡: 17567532-1
Sample Layers	Asbestos Content
Gray Mortar	ND
Red Brick	ND
Sample Composite Homogeneity:	Moderate

Location: 48, Brick and Mortar	Lab ID-Version‡: 17567533								
Sample Layers	Asbestos Content								
Gray Mortar	ND								
Red Brick	ND								
Sample Composite Homogeneity:	Moderate								

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Client: MTGL, Inc. C/O: Mr. Carl Tucker Date of Sampling: 03-29-2024 Re: Vanir Const. - OC Juvenile Hall; 331 The City of Date of Receipt: 03-30-2024

Orange B2 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 49, Concrete Slab Lab ID-Version : 17567534-1

Sample Layers	Asbestos Content							
Gray Concrete	ND							
Sample Composite Homogeneity:	Good							

Location: 50, Concrete Slab Lab ID-Version 1: 17567535-1

Sample Layers	Asbestos Content							
Gray Concrete	ND							
Sample Composite Homogeneity:	Good							

Location: 51, Concrete Slab Lab ID-Version 1: 17567536-1

Sample Layers	Asbestos Content						
Gray Concrete	ND						
Sample Composite Homogeneity:	Good						

Location: 52, Concrete Block Lab ID-Version : 17567537-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

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ASBESTOS PLM REPORT

Orange B2

Location: 53, Concrete Block Lab ID-Version‡: 17567538-1

Sample Layers	Asbestos Content							
Gray Concrete	ND							
Sample Composite Homogeneity:	Good							

Location: 54, Concrete Block Lab ID-Version 1: 17567539-1

Sample Layers	Asbestos Content							
Gray Concrete	ND							
Sample Composite Homogeneity:	Good							

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contact: CAR	CLI INC. LTUCKUL 454-7851 PROJECT INFORMATION	Address: 774 Special Instructions		Z., San Diogo, CA TIME CODES - (TAT)	ent	ve)		* Aug. spp.) Asp spp.)	Air and Surface Bard	(equation)	er Count (NIOSH 740						
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SAMPLE ID	DESCRIPTION	Type (Below)	Volume/Area	NOTES (Time of day, Temp, RH, etc.)	Spore Te	Direct M	Dust Ch	1-Media Si Culturable	Gram St Legionel	Total Colito QuantiTray OTHER. (p	Asbesto	Asbesto	PCR (pk				
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	MTGLI Inc. CARLTUCKUL 619-454-7851 PROJECT INFORMATION	Address. 7 Special Instru	742		San Diago (A ME CODES - (TAT)		ment	uve)) + Asp. spp.)	te Air and Surface Bect	(pseuce)			ber Court (NIOSH 748			
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East: (866) 871-198 Central: (800) 651-4 West: (866) 888-665	1802		교 Light Moderate Heavy			Sport Trap		ape. ab, Bulk	BioCa Swat	00	35	922	67			
	CONTA	CT INFORMATION								181			118	EE	1	
Contact: CA	MTGL, Inc. Address. 7742 Ary		arjons DR	.,San Diogo	192126	7			4sp spp.)	Entra 1	moe)		Count (NIOSH 74)			
	PROJECT INFORMATION		TURN AROUND 1	TIME CODES - (T	TAT)	1 8	affive	жаш	D+4	ble A	Abse		2			
Description: 3 Project Zip Code: 9:	31 The City of Grounge 2868 Sampling Date/Time: 3-2	CoxSt OCJ went Le Hall STD - Standard (Default) The City of Oronge B2 ND - Next Business Day Sampling Dater Time: 3 - 29 - 24 SD - Same Business Day Rushes received after 29 or on weekends, will be considered received the next business day. Plea alert us in advance of		kends, will be received the ss day. Please advance of	ap Analysis	scopic Exam	tive spore count direct exam eracterization	1-Media Surface Fungi (Genus ID + A	Gram Stain and Counts (Culturable	Iform, E coli (Presence/Absence)	QuantiTray-Sewage Screen OTHER (please specify test)	Aspestos in Air - PCM Airborne	Asbestos Bulk - PLMi	3	Allergens (please specifly test)	
SAMPLE ID	DESCRIPTION	Sample TAT Type (Above)	Total Volume/Area (as applicable)	NOT (Time of day, Te		Spore Tr	Direct Mi	Quantitative Dust Charac	1-Media	Gram Sil	Total Coliform,	OTHER	Asbestos	Asbestos Bulk	PCR (pik	Allergen
31 32 33	Stone + mortar	B STD	rlsgin	firepl	ece									X		
35 35 37 38 37 41	concrete floor															
37	fire saftey Board													H		
40	I'x 1" ceranic tile + 11	norfee		floor												
42 43 44 45	Window putty			Exteri	on											
45	SAMPLE TYPE CODES	7	RELINQUISHE	D BY	DATE & TIME	計	1	RE	CEIVE	D BY			С	DATE	& TIN	AE
BC - BioCassette ** A1S - Andersen	CP - Contact Plate T - Tape ST - Spore Trap SW - Swab	O - Other:	ile Been	1	3/29/29	-		Z	7	90	16	3	31	(012 (014)	4	
SAS - Surface Air S	ampler B - Bulk SO - Soil			()				/	/							

NP - Non-potable Water

P - Potable Water D - Dust

CHAIN OF CUST www.eurofinsus.com/Bu	ODY 🎨 eurofins	t Environmen	1 4 4 11 10	Fog Rain Snow	Wind Clear				RI	EQUE						H
East: (866) 871-1984 Central: (800) 651-4802 West: (866) 888-6653			니 Light Moderate Heavy			Spore Trap			0	assel b, Wa Co	O C	359	226	7	Heat	190
	CONTA	CT INFORMATI	ION							Bacreria)			6			
CARLT Phone 619-48	-L, IncL,	Address 77 Special Instruct	742 Arjons DR	San Diagog		ement	(a)			spp.) r and Surface	ice/Absence)		er Count (NIOSH 7400)			
Project ID: Vanir Project Sescription: 331 Project 9286	Coast - OcTuvenil	-62 N	STD - Standard (Default) ND - Next Business Day SD - Same Business Day NH - Weekend/Holiday/ASA	Rushes received or on weekend considered rec next business di alert us in adv	after 2pm a, will be eived the ay. Please ance of	sp. Analysis ilogical particles - supplem	roscopic Exam (Quari	actenization	8	sbie Air Fungi (Genus ID + Asp Stain and Counts (Culturable Ai	E coli (Preser	Quantifray Sewage Screen OTHER: (please specify lest)	tos in Air - PCM Airbarne Fiber	Asbestos Bulk - PLM	ase specify test)	Allergens (please specify test)
SAMPLE ID	DESCRIPTION	Sample Type (Below)	TAT Total Volume/Area (as applicable)	NOTES (Time of day, Temp,	RH, etc.)	Spore Tra	Direct Mic	Dust Cha	1-Media	Culturable Gram Stal	Legionella cutt Total Coliforni,	Quantific OTHER.	Ashestos	Asbestos	PCR (ple	Allergens
47 48 49 C 50	oncrete slab	B	STD~lsqin	Exterio	on									*		
	SAMPLE TYPE CODES		RELINQUISHE	D BY DAT	E & TIME			REC	ENV	ÉD BY		7	D	ATE	8 TIN	ME.
BC - BioCassette" A1S - Andersen SAS - Surface Air Samplei NP - Non-potable Water	CP - Contact Plate T - Tape ST - Spore Trap SW - Swab	O - Other	Doyle Bee	r1 -1	9/24	,	6		>	7	ú	29	_	nst		



Report for:

Mr. Carl Tucker MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126

Eurofins EPK Built Environment Testing, LLC Project: Vanir Const. - OC Juvenile Hall; 331 The City of Orange B2, 5, 7, and 9 Regarding:

EMĹ ID: 3600732

Approved by:

Dates of Analysis: Asbestos PLM: 04-11-2024

Approved Signatory Carlos Rivadeneyra

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267) NVLAP Lab Code 500034-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Date of Sampling: 04-02-2024 Date of Receipt: 04-08-2024 Date of Report: 04-11-2024

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of Orange B2, 5, 7, and 9

ASBESTOS PLM REPORT

Total Samples Submitted: 16 **Total Samples Analyzed:** 16 **Total Samples with Layer Asbestos Content > 1%:**

Lab ID-Version 1: 17610976-1

Lab ID-Version 1: 17610977-1

Lab ID-Version 1: 17610978-1

Location: R-1. Silver Rolled Roofing Over Insulation - 7

	·
Sample Layers	Asbestos Content
Brown Fibrous Material	ND
Black Roofing Felt 3	ND
Black Roofing Felt 2	ND
Black Roofing Felt 1	ND
Black/White Roofing Material	ND
Composite Non-Asbestos Content:	20% Glass Fibers 10% Cellulose
Sample Composite Homogeneity:	Poor

Location: R-2, Silver Rolled Roofing Over Insulation - 9

Sample Layers	Asbestos Content
Brown Fibrous Material	ND
Black Roofing Tar and Felt	ND
Black Roofing Felt	ND
Black/White Roofing Material	ND
Composite Non-Asbestos Content:	20% Glass Fibers 10% Cellulose
Sample Composite Homogeneity:	Poor

Location: R-3, Silver Rolled Roofing Over Insulation - 5

Sample Layers	Asbestos Content
Brown Fibrous Material	ND
Black Roofing Tar and Felt 3	ND
Black Roofing Tar and Felt 2	ND
Black Roofing Tar and Felt 1	ND
Black/White Roofing Material	ND
Composite Non-Asbestos Content:	20% Glass Fibers
_	10% Cellulose
Sample Composite Homogeneity:	Poor

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Lab ID-Version‡: 17610979-1

EMLab ID: 3600732, Page 3 of 6

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B2, 5, 7, and 9

Date of Sampling: 04-02-2024 Date of Receipt: 04-08-2024 Date of Report: 04-11-2024

ASBESTOS PLM REPORT

Location: R-4, Silver Rolled Roofing Over Insulation - 2

Sample Layers	Asbestos Content
Brown Fibrous Material	ND
Black Roofing Tar and Felt 2	ND
Black Roofing Tar and Felt 1	ND
Black/White Roofing Material	ND
Composite Non-Asbestos Content:	20% Glass Fibers 10% Cellulose
Sample Composite Homogeneity:	Poor

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9445 Farnham Street, Suite 103, San Diego, CA 92123 (800) 651-4802 www.eurofinsus.com/Built

Lab ID-Version‡: 17610980-1

Lab ID-Version 1: 17610981-1

EMLab ID: 3600732, Page 4 of 6

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B2, 5, 7, and 9

Date of Sampling: 04-02-2024 Date of Receipt: 04-08-2024 Date of Report: 04-11-2024

ASBESTOS PLM REPORT

Location: R-5, Silver Rolled Roofing Over Insulation - 2

Sample Layers	Asbestos Content
Brown Fibrous Material	ND
Black Roofing Tar and Felt 3	ND
Black Roofing Tar and Felt 2	ND
Black Roofing Tar and Felt 1	ND
Black/White Roofing Material	ND
Composite Non-Asbestos Content:	20% Glass Fibers
_	10% Cellulose
Sample Composite Homogeneity:	Poor

Location: R-6, Roof Mastic - 9

Sample Layers	Asbestos Content
Black Roofing Mastic	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: R-7, Roof Mastic - 7	Lab ID-Version‡: 17610982-1
Sample Layers	Asbestos Content
Black Roofing Mastic	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: R-8, Roof Mastic - 5	Lab ID-Version‡: 17610983-1
Sample Layers	Asbestos Content
Black Roofing Mastic	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

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9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

C/O: Mr. Carl Tucker Date of Sampling: 04-02-2024 Re: Vanir Const. - OC Juvenile Hall; 331 The City of Date of Receipt: 04-08-2024 Orange B2, 5, 7, and 9

Date of Report: 04-11-2024

ASBESTOS PLM REPORT

Client: MTGL, Inc.

Location: R-9, Roof Mastic - 5 Lab ID-Version : 17610984-1

Sample Layers	Asbestos Content
Black Roofing Mastic	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: R-10, Roof Mastic - 2

Lab ID-Version 1: 17610985-1 **Asbestos Content**

Black/White Roofing Mastic	ND
Composite Non-Asbestos Content:	10% Cellulose
_	10% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: R-11, HVAC Caulk/Tape - 7

Sample Layers

Lab ID-Version : 17610986-1

Sample Layers	Asbestos Content
Brown/Black Non-Fibrous Material	ND
Gray/White Caulk	ND
Sample Composite Homogeneity: Poor	

Location: R-12, HVAC Caulk/Tape - 5

Lab ID-Version : 17610987-1

EMLab ID: 3600732, Page 5 of 6

Sample Layers	Asbestos Content
Gray/White Caulk	ND
Sample Composite Homogeneity: Moderate	

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

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(800) 651-4802 www.eurofinsus.com/Built

Lab ID-Version : 17610988-1

Lab ID-Version 1: 17610989-1

Lab ID-Version†: 17610991-1

EMLab ID: 3600732, Page 6 of 6

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Date of Sampling: 04-02-2024 Re: Vanir Const. - OC Juvenile Hall; 331 The City of Date of Receipt: 04-08-2024 Orange B2, 5, 7, and 9 Date of Report: 04-11-2024

ASBESTOS PLM REPORT

Location: R-13, HVAC Caulk/Tape - 2

Sample Layers	Asbestos Content
Gray/White Caulk	ND
Sample Composite Homogeneity: Moderate	

Location: R-14, Vinvl Cap Sheet - B2

Location: K 11, viny1 cap sheet B2	· · · · · · · · · · · · · · · · · · ·
Sample Layers	Asbestos Content
Green Mastic	ND
Gray Fibrous Material	ND
White Non-Fibrous Material	ND
Composite Non-Asbestos Content:	15% Synthetic Fibers
Sample Composite Homogeneity:	Poor

Location: R-15, Vinvl Cap Sheet - B2

Location: R-15, Vinyl Cap Sheet - B2	Lab ID-Version‡: 17610990						
Sample Layers	Asbestos Content						
White Fibrous Material	ND						
White Non-Fibrous Material	ND						
Composite Non-Asbestos Content:	15% Synthetic Fibers						
Sample Composite Homogeneity:	Poor						

Location: R-16. Vinvl Can Sheet - R2

Location: K-10, vinyi Cap Sheet - D2	Eur 12 Version 4. 17010991 1
Sample Layers	Asbestos Content
Black Mastic	4% Chrysotile
Green Mastic	ND
White Fibrous Material	ND
White Non-Fibrous Material	ND
Composite Non-Asbestos Content:	15% Synthetic Fibers
Sample Composite Homogeneity:	Poor

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

CHAIN OF CUSTODY 💸 eurofins	WEATHER	Fog Rain Snow Wind Clear		256-30					
www.eurofinsus.com/Built Built Environment ast: (866) 871-1984 eentral: (800) 651-4802 Yest: (866) 888-6653		Non-Culturable Spore Tape, Trap Swah, Bul	BioCasie Swab, W 00360	003600732					
				Tal III					
roject ID Vanir Coust Oc Twente Hat streescription: 331 The City of orange B-2,5,89	TURN AROUND THE		sticks - supplement Exam (Qualitative) count direct exam	Fungi (Genus ID + Asp. app.) ngi (Genus ID + Asp. siyi.) Counts (Curturable Air and Surface Bacter) coe (Presence:Absence) ge Screen	is specify time.) PCM Airborne Fiber Court (NIOSH 7400) PLM re AA. retify test.) e specify test.)				
D Number DE-24-061-ICT By: WH	H - Weekend/Holiday/ASAP TAT Total Volume/Area (as applicable)	alert us in advance of weekend analysis needs. NOTES (Time of day, Temp, RH, etc.)	Spore Trap Analy Other biological p Direct Microscopii Cuantitative spore Dust Characteriza	da Surface rrable Ar Fu Stain and C meta cultum Coliforn E riTray-Sewit	OTHER (presse specing) Asbestos in Air - PCM Air Asbestos Bulk - PLM Lead (Plb) - Flame AA PCR (please specify test) Allorgens (please specify				
R-2 R4 R5 R6 R6 R7 R8	TO ~ (591n	79 52 2 1			i.				
2 11 HVAC Conte/Tape 12 13 12 13 12 14 14 VOLD DB 4-2-24		5 DB Z							
SAMPLE TYPE CODES	Mighelle The			CEIVED BY	06 C 9				

By submitting this Chain of Custody, you agree to be bound by the terms and conditions set forth at: https://www.eurofinsus.com/environment-testing/built-environment/resources/sampling-guides-and-forms ©COPYRIGHT 2022 EUROFINS EPK BUILT ENVIRONMENT TESTING, LLC

CHAIN OF CUSTODY & eurofins

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East: (866) 871-1984 Central: (800) 651-4802 West: (866) 888-6653

Built Environment Testing

V	VEATHER	Fog	Rain	Snow	Wind	Cles
	None Light					
LEVEL	Moderate					
-	Heavy					

REQUEST
Cultu

Non-Culturable BioCassette " /

Spore



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		CONTAC	T INFORMA	TION								(S)		T	H	6	П		
Company MTG	ucku		Address. 7742 Arjons DR., San Diogo 192126							0.0	urface Bacteri				Count (NIOSH 7408)				
	4-7851								Ш		dds dsp	spp.		8		time (Н
P	ROJECT INFORMATIO				TURN AROUND	TIME CODES	- (TAT)		Guerative	1	1 + 1	Asp ole Ale		upseq.		Die C			
roject ID: Van'r roject 331 - roject 939/	Coust - OC. The City of Sampling Date Time:	Towenile	Hall -B2	STD - Standard (Default) Rushes received or on weekend considered reconsidered reco		dushes received after 2pm or on weekends, will be considered received the text business day. Please			tion	ungi (Genus ID	gi (Genus ID + Asp. spp.) ounts (Culturable Air and Surface		coh (Presence/Absence ade Screun	specify test)	CM Arbome F	N.) - Hume AA are specify less)	specify test)	
	Sumpled Sumpled By:	00	5		ekend/Holiday/ASA		is in advance of d analysis needs.	Arraby		cterizal	face F	and O	office	Sewsa	(please s	Air - P	W.P.	special specia	ease
SAMPLE ID	DESCRIPTION	ON	Sample Type (Below)	TAT (Above)	Total Volume/Area (as applicable)	N	IOTES y, Temp, RH, etc.)	Spore Trap	Direct Mora	Dust Chara	1-Media Su	Culturable / Gram Stain	Tegionesia (Total Colifor QuantiTray		Asbestos in	B sop	PCR (pease	E S
15 WRIT	ny (cap s	heet	В	SID		B - B -	2												
	SAMPLE TYPE CODE				RÉLINQUISHE	En By	DATE & TIME			DE	CEIM	E0.8							
BC - BioCassette		T - Tape	O - Other:	11		A STATE OF THE STA	-	-	_	KE	CEIV	ED B	1					8 TIN	
A1S - Andersen SAS - Surface Air Sampler NP - Non-potable Water	ST - Spore Trap B - Bulk	SW - Swab SO - Soil D - Dust		C	icyllo This	huta	4/5/24			2		1				6	28	D	4

United States Department of Commerce National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 500034-0

Eurofins EMLab P&K

San Diego, CA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2024-01-01 through 2024-12-31

Effective Dates



For the National Voluntary Laboratory Accreditation Program



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Eurofins EMLab P&K

9445 Farnham St #103 San Diego, CA 92123 Quynh Nguyen Phone: 800-651-4802

Email: quynh.nguyen@et.eurofinsus.com https://www.eurofinsus.com/environment-testing/

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 500034-0

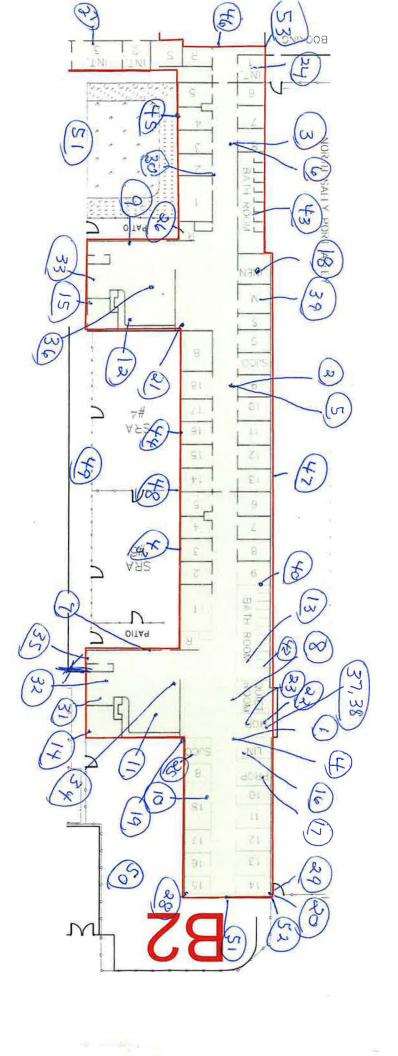
Bulk Asbestos Analysis

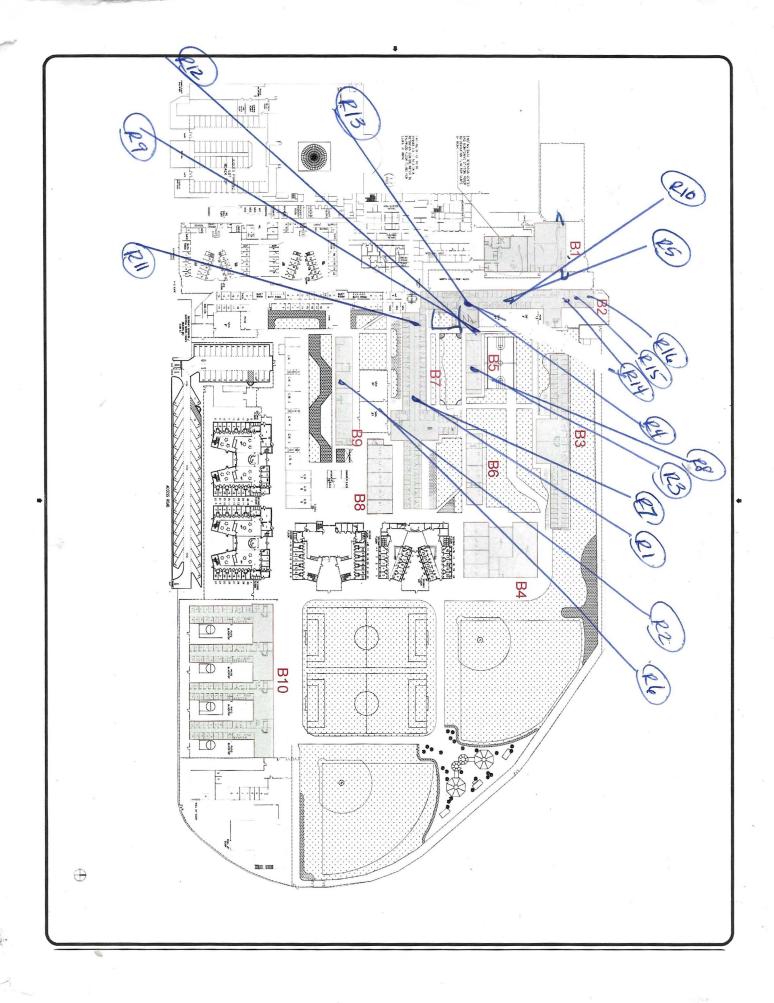
<u>Code</u>	<u>Description</u>
18/A01	EPA 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

For the National Voluntary Laboratory Accreditation Program

APPENDIX 2

SAMPLE LOCATION MAP (NOT TO SCALE)





APPENDIX 3 PHOTO DOCUMENTATION



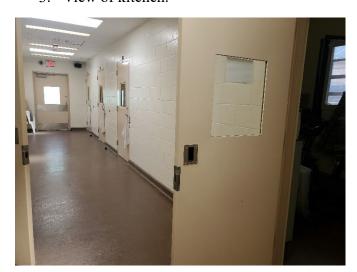
1. Typical view of common areas.



2. Typical view of bathrooms.



3. View of kitchen.



4. View of hallways and cells.



5. Typical view of cell.



6. View of north end of Building 2. ACM mastic under vinyl cap sheet.

APPENDIX 4 INSPECTOR CERTIFICATIONS

California Certified Asbestos Consultant (CAC)

Card Holder: <u>Michelle Ehresman</u>

Certification Number: <u>14-5323</u> Exp.: <u>11/19/2024</u>

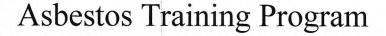
Current Employer: MTGL, Inc.

Supporting Certifications:

AHERA Contractor/Supervisor Refresher Certification
 AHERA Building Inspector Refresher Certification
 AHERA Management Planner Refresher Certification
 AHERA Project Designer Refresher Certification
 Exp. 7/27/2024
 Exp. 7/27/2024
 Exp. 8/16/2024



MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126 858-537-3999



This is to certify

Michelle Ehresman 1656

Has successfully completed 8 hours of formal training required by section 206 of TSCA II entitled

Contractor/Supervisor Refresher

Presented By

Environmental Compliance Training PO BOX 16555 San Diego, CA. 92176-6555 (858) 558-7465

Director:

Walter T. Amenta, CIH, Approval Number CA-029-04

Class Dates:

06-24-2023

Exam Date:

n/a

Expiration Date: 06-24-2024

Certification Number: 0623ABCA167303

Certificate Of Completion

Asbestos Building Inspector Refresher Course

DOSH #: CA-015-06

Michelle Ehresman

ABIR0727230010N35227

David Wallach

Principal Instructor

7/27/2023

Course Start Date

7/27/2023

Course End Date

Michael W. Horner
Training Director

7/27/2023 Exam Date

7/27/2024

Expiration Date

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



NATEC International, Inc.

National Association of Training and Environmental Consulting



1100 Technology Circle, Suite A, Anaheim, CA 92805 · www.natecintl.com · 800-969-3228

Important Industry Contacts

CAL-OSHA: Ph# (916) 574-2993

(916) 483-0572 Fax Notification Web: www.dir.ca.gov or calosha.com

CDPH/CLPPB:Ph# (510) 620-5600

Web: www.cdph.ca.gov/programs/CLPPB

SCAQMD:

Ph# (909) 396-3739 Fax#(909) 396-3342

BAAQMD:

Ph# (415) 749-4762

NATEC International, Inc.

National Association of Training and Environmental Consulting

Asbestos · Lead · Mold · HAZWOPER

PO Box 8657, Fountain Valley, CA 92728 (714) 678-2750, (800) 969-3228, Fax (714) 678-2757 www.natecintl.com

NATEC International, Inc.

National Association of Training and Environmental Consulting
*Note: Card is not suitable substitute for certificate and is not accepted by SCAQMD as proof of
certification

This Court Association

This Card Acknowledges That Michelle Ehresman

Holds Training Certification For Asbestos Building Inspector Refresher Course

Expiration: 7/27/2024

Training Date 7/27/2023

ABIR0727230010N35227

Michael W. Horner Training Director

Certificate Of Completion

Asbestos Project Designer Refresher Course

DOSH #:CA-015-10

Michelle Ehresman

APDR0816230004N35415

Norm Kramer

Principal Instructor

8/16/2023

0/10/2023

Course Start Date

8/16/2023

Course End Date

8/16/2023

Exam Date

Michael W. Horner

Training Director

8/16/2024

Expiration Date

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



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This Card Acknowledges That Michelle Ehresman

Holds Training Certification For Asbestos Project Designer Refresher Course

Expiration: 8/16/2024

ining Date 8/16/2023

artificate No. APDR0816230004N35415

Michael W. Horner Training Director

Certificate Of Completion

Asbestos Management Planner Refresher Course

DOSH #: CA-015-08

Michelle Ehresman

AMPR0727230007N35357

David Wallach

Principal Instructor

7/27/2023

7/27/2023

Michael W. Horner

Training Director

7/27/2024

7/27/2023 Course Start Date

Course End Date

Exam Date

Expiration Date

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



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This Card Acknowledges That Michelle Ehresman

Holds Training Certification For Asbestos Management Planner Refresher Course

Expiration: 7/27/2024

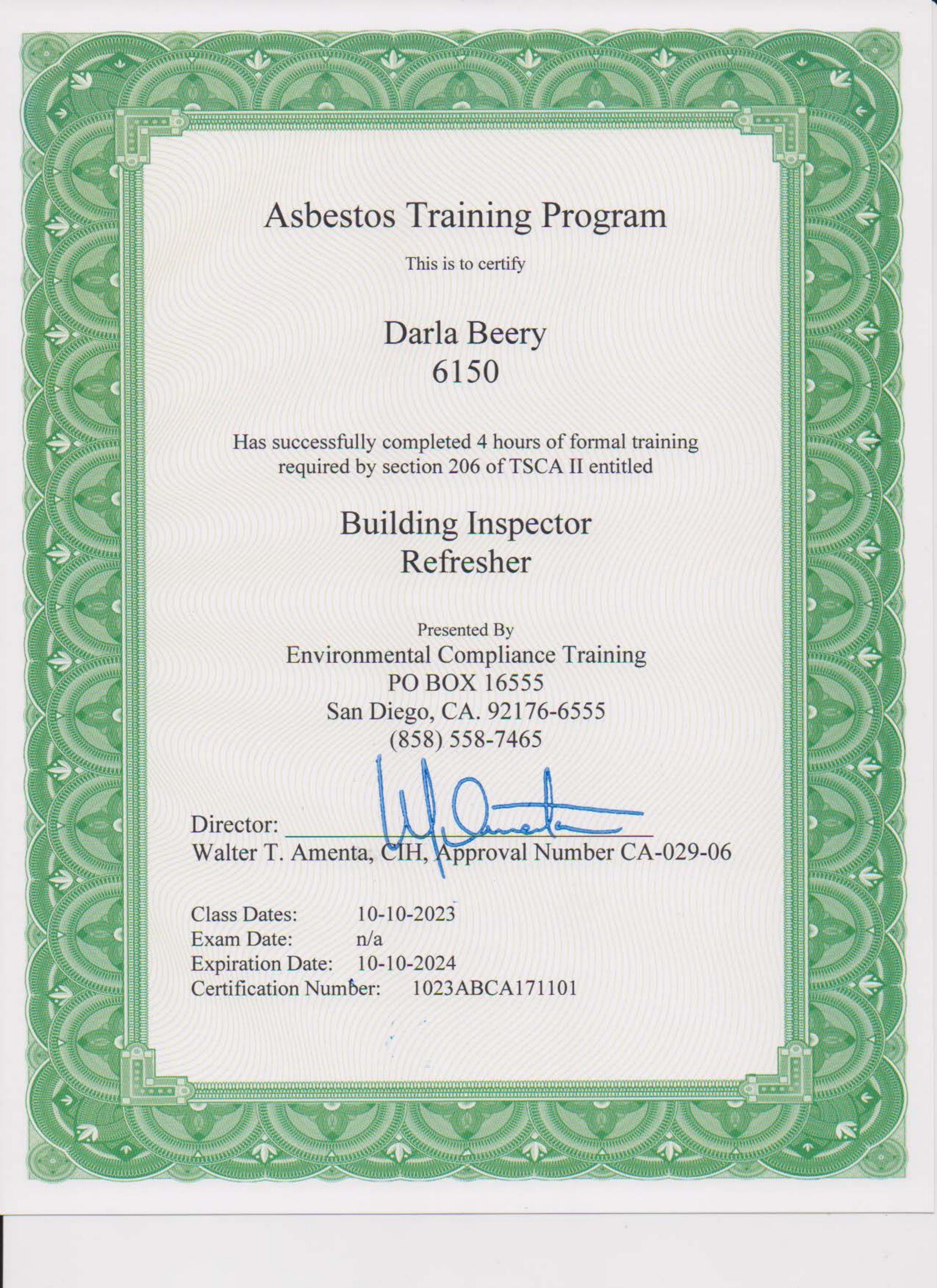
Training Date 7/27/2023

Certificate No.

AMPR0727230007N35357

Michael W. Horner
Training Director

Darla Beery AHERA Building Inspector Certification



LEAD-BASED PAINT INSPECTION REPORT

Juvenile Hall-Building 2 331 The City Drive, S Orange, California 92868

Prepared for:

Vanir Construction 4540 Duckhorn Drive, Suite 300 Sacramento, California 95834

Prepared by:

MTGL, Inc. 7742 Arjons Drive San Diego, California 92126 858-537-3999

Project Number:

SDPE-24-061.1CT

Michelle Ehresman, CAC, LIA/LPM, ICRA Certification Number: CDPH# 0458/0459

Report Issuance Date: April 22, 2024

TABLE OF CONTENTS

SECTION

INTRODUCTION	
General Information	
Authorization Performance	
Terrormance	
WARRANTY	•••••
METHODOLOGY	
General References	
Lead Sampling Procedures Performance Characteristic Sheets	
renormance Characteristic Sheets	
SUMMARY of FINDINGS	
Lead-Based Paint Summary	
HAZARD CONTROL AND ABATEMENT OPTIONS & LEAD SAFE WORK PRACTICES	
LEAD BASED PAINT DISCLOSURE	
APPENDICES	
Appendix 1 –XRF Data Report and Performance Characteristic Sheet	
Appendix 2 – Site Drawing	
Appendix 3 – Glossary	
Appendix 4 – Inspector Certification	
Appendix 5 – CDPH 8552 Form	
Appendix 6 – Renovate Right	

GENERAL INFORMATION

MTGL was retained by Vanir Construction to conduct a lead-based paint inspection at the subject property located at 331 The City Drive in Orange, California 92868. All inspections were in accordance with the guidelines set forth in the U.S. Department of Housing and Urban Development. This document is prepared for the sole use of Vanir Construction and/or any Regulatory or Governmental agencies that may directly become involved with this project.

MTGL's scope of work was limited to the following Client specified locations at the property:

• Building 2 (Single story, wood frame with brick and grout on a concrete slab.)

PURPOSE

The purpose of this inspection is to identify and assess painted components at the subject location above specified regulatory action levels within the Client specified scope of work.

AUTHORIZATION

Authorization to perform the survey was given by Mr. Scott Battles with a notice to proceed via proposal SDPE-24-061.1CT.

PERFORMANCE

All visual inspections and component testing was performed in accordance with Federal, State and local requirements. The inspection was performed by Michelle Ehresman, a California Certified Lead Inspector/Assessor on April 1, 2024.

LEAD-BASED PAINT SURVEY

MTGL, Inc. warrants that the findings contained herein have been prepared with the level of care and skill exercised by experienced and knowledgeable environmental consultants who are appropriately licensed or otherwise trained to perform lead-based paint assessments pursuant to the scope of work required on this project.

MTGL, Inc. warrants that the findings contained herein have been prepared in general accordance with accepted professional practices as applied by similar professionals in the community at the time of its preparation. Changes in the state of the art or in applicable regulations cannot be anticipated and have not been addressed in this report.

The survey included the inspection of accessible materials only. MTGL did not inspect or sample inaccessible areas such as behind walls or within ductwork and did not dismantle any part of the structure to survey inaccessible areas. For the purpose of this warranty, inaccessible is defined as areas of the building that could not be tested (sampled) without destruction of the structure or a portion of the structure. Inaccessible materials that are visible to MTGL inspectors shall be assumed to be lead-based paint coated.

It is the owner's legal obligation to disclose the inspection results to tenants and/or purchasers before obligation under 24 CFR part 35 and 40 CFR part 745 (published in the Federal Register, Volume 61, Number 45, March 6, 1996, starting on P. 9064; copies of the regulations and related materials can be obtained from the National Lead Information Center Clearinghouse, (1-800-424-LEAD)

GENERAL REFERENCES

LEAD-BASED PAINT

Lead-based paint testing was conducted in accordance with the Title 17, California Code of Regulations, Division 1, Chapter 8, Accreditation, Certification and Work Practices in Lead-Related Construction, Section 36000 and the United States Department of Housing and Urban Developments *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, Chapter 7 Lead-Based Paint Inspections*, as published in June 1995 and revised in 1997.

The State of California, HUD and the EPA currently define lead-based paint as paints or other surface coatings, which contain lead equal to or greater than 1.0 milligrams of lead per square centimeter of surface area (mg/cm²), or equal to or greater than 0.5% by weight.

Lead-based paint testing was conducted using portable x-ray fluorescence (XRF) spectrum analyzer, Model Niton XLP 300, Manufactured by Niton, Inc. The Niton XLP 300 is calibrated to measure the K-shell x-ray emissions of lead. The K-shell is normally used for paint analysis because it measures lead in all layers of paint films, including the lower layers where higher concentrations of lead are usually found. An initial calibration and ending calibration is validated each day with a laminated Lead Paint Standards testing card which is provided by the manufacturer. The card is a direct comparison to the paint standard to NIST kit SRM2579a with a spectrum analyzer. If an instrument does not maintain consistent calibrations after following the manufacturer's recommendation, the unit is removed from the site and sent back to the manufacturer for service.

In the instance where paint chip samples are collected, sample collections are conducted by the requirements of the American Society of Testing and Materials standard E 1729, Standard Practice for Field Collection of Dried Paint Samples for Lead Determination by Atomic Spectrometry Techniques and HUD Guidelines.

Performance Characteristic Sheet (PCS)

Performance Characteristic Sheets for most XRF models can be found on the U.S. Department of Housing and Urban Developments Office of Healthy Homes and Lead Hazard Control website, specifically HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.(http://www.hud.gov/offices/lead/lbp/hudguidelines/index.cfm). Operating specification and procedures for the XRF used for this survey can be downloaded at the website above. PCS's can also be obtained by calling toll free to the National Lead Information Clearinghouse, at 800-424-LEAD. Persons with hearing or speech impediments may access the above number via TTY by calling the Federal Information Relay Service at 800-887-8339, toll free.

GENERAL SUMMARY

Lead-Based Paint Inspection Results

The purpose of the lead-based paint survey was to evaluate the referenced facility's painted components that may contain lead-based paint. Suspect components identified during the survey included but not limited to the following:

- Interior: Door and Window Components, Wall, Floor and Ceilings
- Exterior: Wall, Windows, and Doors

The following is a summary of lead based painted components identified that contain lead greater than 1.0 mg/cm² or greater * (Please see attachment I for a detail report of findings.)

- No lead-based paint greater than 1.0 mg/cm2 was identified on the components tested.
- Intact lead containing (<1.0 mg/cm2) pink ceramic wall, base tile was identified in the bathrooms and staff bathrooms.
- Intact lead containing (<1.0 mg/cm2) pink countertop and wall tile was identified in the kitchen.
- Intact lead containing (<1.0 mg/cm2) porcelain sink was identified in the Room 122.
- Intact lead containing (<1.0 mg/cm2) yellow countertop and wall tile was identified in the kitchenette.

*MTGL, Inc. is not responsible for actual quantity of the material(s). MTGL recommends bidding contractors to calculate quantities for estimated abatement costs. When evaluating this report, it is assumed that according to Chapter 7 HUD guidelines, that if one testing combination (i.e. window, door) is positive for lead in an interior or exterior room equivalent, that all other similar testing combinations in those areas are assumed to be positive.

Deteriorated lead-based paint was not identified on the accessible components tested however, lead containing, ceramic walls, base tile, countertop tile and a white porcelain sink was identified and Title 8, CCR Section 1532.1 will apply to minimize a lead dust hazard and work protection during demolition.

When evaluating this report, it is assumed that according to Chapter 7 HUD guidelines, that if one testing combination (i.e. window, door) is positive for lead in an interior or exterior room equivalent, that all other similar testing combinations in those areas are assumed to be positive.

Current EPA and Cal/EPA regulations do not require lead-based paint to be removed prior to demolition, unless found to be loose and peeling. Provided that paints are securely adhered to the

substrates, deposal of the debris can be handled in California as non-hazardous and non-RCRA waste, pending characterization of the waste.

Loose and peeling paints or other wastes exceeding the Total Threshold Level Concentration (TTLC) of 1,000 ppm ($\mu g/g$) would be required to be disposed of as non-RCRA hazardous waste. However, if the leachable lead contents of the wasted exceed the Soluble Threshold Level Concentrations (STLC) of 5 mg/liter, the wastes must be disposed of as RCRA waste.

Several government agencies have definitions for what amount of lead constitutes paint to be considered "lead-based". The Department of Housing and Urban Development (HUD) has designated the amount to be 1.0 mg/cm², 0.5% by weight or 5000 ppm (parts per million). The HUD regulations are related to potential hazards in the home environment and not to construction activities. The amount designated for high contact play areas is 400 ppm.

Lead Safe Work Practice Requirements for Maintenance, Renovation or Remodeling

EPA's RRP Rule requires anyone (remodeling, renovation and painting contractors and most other trades) who works in pre-1978 housing for compensation and who might disturb painted surfaces to become an EPA Certified Renovator by taking an 8-hour RRP "Lead Safe Work Practices" class from an EPA accredited training provider. The initial certification is good for five (5) years. To "renew" contractors must take a 4-hour RRP Refresher class before their initial certification expires. The RRP rule applies to anyone who works for compensation in pre-1978 housing and/or child-occupied facilities who might disturb painted surfaces, including:

- General contractors
- Demolition workers
- Remodeling contractors
- Maintenance workers in multi-family housing
- Painters, plumbers and most specialty trades.

The RRP rule covers a lot of jobs: renovation, remodeling, painting, window replacement, plumbing, electrical work, heating & air-conditioning, demolition, plus work performed by trades like carpenters, electricians and handymen. The rule also applies to persons working for rental property owners, schools, and day care providers. And, it applies to non-profits and governmental agencies. The RRP Rule requires that "Lead Safe Work Practices" be used when disturbing more than 6 square feet per room or 20 square feet outside.

It shall be noted that California's lead-based paint regulations cover ALL pre-78 structures that have not been tested - not just Target Housing and Child-Occupied Facilities. (Title 17, CCR, Div 1, Ch 8). Since 2003, California law (Title 17) has required that "Lead Safe Work Practices" be used in ALL pre-1978 structures when disturbing any amount of known or "presumed" lead-based paint. Contractors may have taken additional training to meet State of California requirements for Lead-Related Construction and obtain the required California Department of Public Health-Lead Related Construction Certifications for permanent abatement. This certification supplements but does not replace the EPA RRP certification. CDPH State Certified

Lead Abatement Supervisors and Workers must also become RRP certified, and abatement firms must also be RRP Certified if they do non-abatement jobs.

Contractors and renovators who work or compensation in pre-1978 housing and/or a child-occupied facility that will disturb painted surfaces greater than 6 square feet per room or 20 square feet outside must give Clients a pamphlet called "Renovate Right" and get a signed receipt before beginning a job. Contractors can call (800) 424-5323 and ask for free copies of "Renovate Right" and the "Small Entity Compliance Guide to Renovate Right" or both can be downloaded as PDF files from the EPA website.

The Consumer Product Safety Commission (CPSC) has defined lead-based paint as surface coatings containing lead concentrations greater than 90 ppm. All children's products, and some furniture, for adult and children, must not contain a concentration of lead greater than 0.009 percent (90 parts per million) in paint or any similar surface coatings. Household paint must also meet this requirement. In 1978, the CPSC banned the sale of lead-based paint to consumers and the use of lead-based paint in residences and public buildings.

Please note that the detection of any amount of lead in a component will trigger numerous requirements from the California Occupations Safety and Health Administration (Cal-OSHA) lead in construction standard (e.g., Title 8, CCR Section 1532.1), even with common tasks such as drywall demolition, manual paint scraping, and manual paint sanding. The employer is required to conduct air sampling to determine the exposure to lead during these tasks and during other tasks that could result in lead exposure. Until actual exposures are determined, workers are required to wear respirators that are appropriate to the task. Detailed requirements are published in the Cal-OSHA standard for lead in construction.

All workers who may be exposed to lead must be trained in the hazards of lead. The results of air sampling are used to determine if workers are exposed to lead above the action level (AL) of 30 micrograms per cubic meter of air or above the permissible exposure limit (PEL) of 50 micrograms of lead per cubic meter of air, averaged over an 8-hour shift. Exposures above the AL or PEL will trigger additional requirements including engineering controls, proper housekeeping, washing facilities for hand and face washing, additional worker training, respiratory protection, medical monitoring, and additional air sampling. The employer must have a written compliance plan.

Lead Paint

Interim controls which are temporary measures may include the following:

- Paint Film Stabilization: "scrape off the loose and flakey paint and reapply with regular house paint".
- Friction (places that rub) and Impact (places that are bumped or banged) Surface Treatments (Doors, windows, cabinets, floors, etc): treated by covering the surfaces with an abrasion-resistant material, or by repairing to an intact working condition in order to minimize dust.
- Special Cleaning: reduction of lead hazard by cleaning up visible dust by HEPA vacuuming, washing and HEPA vacuuming again.

Interim controls typically last less than 20 years and will require the reevaluation of components on a periodic basis.

As of April 22, 2010, the EPA passed the Renovator, Repair and Paint Rule (RRP) (40 CFR Part 745.90) which states all renovation and painting contractors and other trades who work in pre-1978 housing and who might disturb painted surfaces must become Lead Certified Renovators by taking a one-day course about using "Lead Safe Work Practices" on the job.

Abatement methods which eliminate or put a barrier in front of lead hazards may include the following:

- Encapsulation: covering lead paint with a special liquid or thick coating (not regular paint). Works well on surfaces that are in good condition and should not be used on friction or impact surfaces.
- Enclosure: covering lead paint with a solid, dust-tight barrier that is usually mechanically attached (sheetrock, paneling, drywall).
- Replacement: removal of lead covered components (doors, windows, molding) and replacing with lead free components.
- Removal: recommended when other options may not be feasible; removal of lead paint by means of heat guns, scraping and sanding, power tools, chemical stripping and/or use of abrasives and hydro blasting.

Abatement controls typically last more than 20 years. Abatement methods that will result in the smallest amount of dust generated are preferred. Workers who partake in the above abatement methods should be California State Certified Lead Supervisors and Workers. Clearance sampling after abatement must be conducted by a certified lead-based paint inspector

Lead Safe Work Practice Requirements for Maintenance, Renovation or Remodeling

Lead-based paint, deteriorated paint or lead-based hazards require lead safe work practices. These practices are necessary for regular lead based paint hazard controls, repair, remodeling, renovation or other work activities that may disturb lead based paint above HUD's de minimis levels. HUD describes de minimus levels as follows:

- 20 square feet on exterior surfaces
- 2 square feet in any one interior room or space
- 10% of a type of building component with a small surface area (such as painted windowsills) on interior or exterior surfaces

Workers who may disturb lead-based paint above the de minimis level during repair, renovation or maintenance activities or any other work efforts that disturbs a known or assumed lead-based paint above HUD's de minimis shall be trained in lead safe work practices.

Firms providing abatement services must be certified as an abatement firm by the EPA or the State. Workers conducting abatement must be trained and certified as abatement workers by a training provider accredited by the EPA or State.

SECTION 6 DISCLOSURE

A copy of this summary must be provided to new lessees (tenants) and purchasers of this property under Federal Law (24 CFR part 35 and 40 CFR part 745) before they become obligated under a lease or sales contract. The complete report must also be provided to new purchasers and it must be made available to new tenants. Landlords (lessors) and sellers are also required to distribute an educational pamphlet and include standard warning language in their leases or sales contracts to ensure that parents have the information they need to protect their children from lead-based paint hazards.

It is the owner's legal obligation to disclose the inspection results to tenants and/or purchasers before obligation under 24 CFR part 35 and 40 CFR part 745 (published in the Federal Register, Volume 61, Number 45, March 6, 1996, starting on P. 9064; copies of the regulations and related materials can be obtained from the National Lead Information Center Clearinghouse, (1-800-424-LEAD).

SECTION 7 Appendices

Appendix 1

XRF Data Sheet

and

Performance Characteristic Sheet (PCS)

Project: Vanir- Juvenile Hall-Building 2, 331 The City Drive, Orange, CA 92868

Inspection Date: April 1, 2024

(EPA Regulated Lead-Based Paint= 1.0 mg/cm²)

(County of Los Angeles= 0.7mg/cm²) (<LOD= Below Limit of Detection)

					Comp	onent					
Sample #	Unit	Side	Location	Test Location	Structure	Member	Paint Condition	Substrate	Color	XRF Reading (mg/cm2)	Classification (pos, neg, inc.)
1	B 2-M		Calibration						Red NIST	1.0	
2	B 2-M		Calibration						Red NIST	1.0	
3	B 2-M		Calibration						Red NIST	1.0	
4	B 2-M	A	Common Rm	Wall			Intact	Concrete	White	.17	Negative
5	B 2-M	В	Common Rm	Wall			Intact	Concrete	White	.11	Negative
6	B 2-M	С	Common Rm	Wall			Intact	Concrete	White	.21	Negative
7	B 2-M	D	Common Rm	Wall			Intact	Concrete	White	.15	Negative
8	B 2-M	В	Common Rm	Door			Intact	Metal	Blue	0.07	Negative
9	B 2-M	В	Common Rm	Door	Frame		Intact	Metal	Blue	.013	Negative
10	B 2-M	В	Common Rm	Floor			Intact	Concrete	Brown	<lod< td=""><td>Negative</td></lod<>	Negative
11	B 2-M	D	Common Rm	Wall	Cabinet		Intact	Wood	Brown	<lod< td=""><td>Negative</td></lod<>	Negative
12	B 2-M	A	Common Rm	Wall	Cabinet		Intact	Wood	Brown	<lod< td=""><td>Negative</td></lod<>	Negative
13	B 2-M	С	Common Rm	Ceiling	Conduit		Intact	Metal	White	.03	Negative
14	B 2-M	A	Room 123	Door			Intact	Metal	Blue	.19	Negative
15	B 2-M	A	Room 123	Door	Frame		Intact	Metal	Blue	0.06	Negative
16	B 2-M	A	Room 123	Floor	Tile		Intact	Ceramic	Pink	<lod< td=""><td>Negative</td></lod<>	Negative
17	B 2-M	A	Room 123	Wall	Tile		Intact	Ceramic	Pink	10.1	Positive
18	B 2-M	С	Room 123	Counter	Tile		Intact	Ceramic	Pink	7.8	Positive
19	B 2-M	A	Bathroom	Door			Intact	Metal	Blue	0.17	Negative
20	B 2-M	A	Bathroom	Door	Frame		Intact	Metal	Blue	. 09	Negative
21	B 2-M	С	Bathroom	Floor	Tile		Intact	Ceramic	Pink	<lod< td=""><td>Negative</td></lod<>	Negative
22	B 2-M	С	Bathroom	Wall	Tile		Intact	Ceramic	Pink	9.7	Positive
23	B 2-M	A	Bathroom	Window	Frame		Intact	Metal	Blue	.17	Negative

Project: Vanir- Juvenile Hall-Building 2, 331 The City Drive, Orange, CA 92868

Inspection Date: April 1, 2024

(EPA Regulated Lead-Based Paint= 1.0 mg/cm²) (County of Los Angeles= 0.7mg/cm²) (<LOD= Below Limit of Detection)

,					Comp	onent					
Sample #	Unit	Side	Location	Test Location	Structure	Member	Paint Condition	Substrate	Color	XRF Reading (mg/cm2)	Classification (pos, neg, inc.)
24	B 2-M	A	Bathroom	Ceiling			Intact	Concrete	White	0.08	
25	B 2-M	С	Cell 2	Door			Intact	Metal	Blue	<lod< td=""><td>Negative</td></lod<>	Negative
26	B 2-M	С	Cell 2	Door	Frame		Intact	Metal	Blue	.15	Negative
27	B 2-M	A	Cell 2	Window	Screen		Intact	Metal	White	.21	Negative
28	B 2-M	A	Cell 2	Window	Casing		Intact	Concrete	White	0.02	Negative
29	B 2-M	A	Cell 2	Wall			Intact	Concrete	White	.02	Negative
30	B 2-M	В	Cell 2	Wall			Intact	Concrete	White	0.10	Negative
31	B 2-M	С	Cell 2	Wall			Intact	Concrete	White	0.07	Negative
32	B 2-M	D	Cell 2	Wall			Intact	Concrete	White	0.07	Negative
33	B 2-M	С	Cell 4	Door			Intact	Metal	Blue	<lod< td=""><td>Negative</td></lod<>	Negative
34	B 2-M	C	Cell 4	Door	Frame		Intact	Metal	Blue	.12	Negative
35	B 2-M	A	Cell 4	Window	Screen		Intact	Metal	White	.11	Negative
36	B 2-M	A	Cell 4	Window	Casing		Intact	Concrete	White	0.11	Negative
37	B 2-M	A	Cell 4	Wall			Intact	Concrete	White	.10	Negative
38	B 2-M	В	Cell 4	Wall			Intact	Concrete	White	0.07	Negative
39	B 2-M	C	Cell 4	Wall			Intact	Concrete	White	0.12	Negative
40	B 2-M	D	Cell 4	Wall			Intact	Concrete	White	0.10	Negative
41	B 2-M	A	Cell 9	Door			Intact	Metal	Blue	<lod< td=""><td>Negative</td></lod<>	Negative
42	B 2-M	A	Cell 9	Door	Frame		Intact	Metal	Blue	.17	Negative
43	B 2-M	C	Cell 9	Window	Screen		Intact	Metal	White	.14	Negative
44	B 2-M	C	Cell 9	Window	Casing		Intact	Concrete	White	0.12	Negative
45	B 2-M	A	Cell 9	Wall			Intact	Concrete	White	.11	Negative
46	B 2-M	В	Cell 9	Wall			Intact	Concrete	White	0.19	Negative

Project: Vanir- Juvenile Hall-Building 2, 331 The City Drive, Orange, CA 92868

Inspection Date: April 1, 2024

(EPA Regulated Lead-Based Paint= 1.0 mg/cm²) (County of Los Angeles= 0.7mg/cm²) (<LOD= Below Limit of Detection)

`					Comp	onent					
Sample #	Unit	Side	Location	Test Location	Structure	Member	Paint Condition	Substrate	Color	XRF Reading (mg/cm2)	Classification (pos, neg, inc.)
47	B 2-M	В	Room 122	Wall	Sink		Intact	Porcelain	White	6.6	Positive
48	B 2-M	C	Room 120	Window	Screen	Frame	Intact	Metal	White	.07	Negative
49	B 2-M	C	Room 120	Wall			Intact	Concrete	White	<lod< td=""><td>Negative</td></lod<>	Negative
50	B 2-M	A	Room 120	Door			Intact	Metal	Blue	0.1	Negative
51	B 2-M	A	Room 120	Door	Frame		Intact	Metal	Blue	0.11	Negative
52	B 2-M	A	Staff RR	Wall	Base	Tile	Intact	Ceramic	Pink	4.9	Positive
53	B 2-M	A	Staff RR	Floor	Tile		Intact	Ceramic	Pink	<lod< td=""><td>Negative</td></lod<>	Negative
54	B 2-M	В	Staff RR	Wall	Sink		Intact	Porcelain	White	<lod< td=""><td>Negative</td></lod<>	Negative
55	B 2-M	A	Room 100	A/H	Frame		Fair	Metal	Red	0.07	Negative
56	B 2-M	A	Room 100	Floor			Poor	Concrete	Red	<lod< td=""><td>Negative</td></lod<>	Negative
57	B 2-O	A	Common Rm	Door			Intact	Metal	Tan	0.07	Negative
58	B 2-O	A	Common Rm	Door	Frame		Intact	Metal	Tan	.021	Negative
59	B 2-O	A	Common Rm	Wall			Intact	Concrete	White	.10	Negative
60	B 2-O	В	Common Rm	Wall			Intact	Concrete	White	.17	Negative
61	B 2-O	С	Common Rm	Wall			Intact	Concrete	White	.12	Negative
62	В 2-О	D	Common Rm	Wall			Intact	Concrete	White	.09	Negative
63	В 2-О	С	Common Rm	Floor			Intact	Concrete	Brown	<lod< td=""><td>Negative</td></lod<>	Negative
64	B 2-O	A	Common Rm	Wall	Tile		Intact	Ceramic	Yellow	5.6	Positive
65	В 2-О	A	Common Rm	Counter	Tile		Intact	Ceramic	Yellow	6.1	Positive
66	В 2-О	A	Common Rm	Wall	Cabinet	Door	Intact	Wood	White	<lod< td=""><td>Negative</td></lod<>	Negative
67	В 2-О	A	Common Rm	Wall	Cabinet	Casing	Intact	Wood	White	<lod< td=""><td>Negative</td></lod<>	Negative
68	В 2-О	В	Common Rm	Door			Intact	Metal	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
69	В 2-О	В	Common Rm	Door	Frame		Intact	Metal	Tan	.04	Negative

Project: Vanir- Juvenile Hall-Building 2, 331 The City Drive, Orange, CA 92868

Inspection Date: April 1, 2024

(EPA Regulated Lead-Based Paint= 1.0 mg/cm²)

(County of Los Angeles= 0.7mg/cm²) (<LOD= Below Limit of Detection)

,					Comp	onent					
Sample #	Unit	Side	Location	Test Location	Structure	Member	Paint Condition	Substrate	Color	XRF Reading (mg/cm2)	Classification (pos, neg, inc.)
70	B 2-M	В	Common Rm	Window 1	Frame		Intact	Metal	Brown	<lod< td=""><td>Negative</td></lod<>	Negative
71	B 2-M	В	Common Rm	Window 1	Sill		Intact	Metal	Brown	.12	Negative
72	B 2-M	В	Common Rm	Wall	Fire Box		Intact	Metal	Red	<lod< td=""><td>Negative</td></lod<>	Negative
73	B 2-M	C	Room 122	Wall	Tile		Intact	Ceramic	Pink	8.7	Positive
74	B 2-M	C	Room 122	Wall	Cabinet	Door	Intact	Wood	White	<lod< td=""><td>Negative</td></lod<>	Negative
75	B 2-M	С	Room 122	Wall	Cabinet	Casing	Intact	Wood	White	<lod< td=""><td>Negative</td></lod<>	Negative
76	B 2-M	A	Room 122	Floor	Tile		Intact	Ceramic	Tan	LOD	Negative
77	B 2-M	A	Room 122	Door	Frame		Intact	Metal	White	0.10	Negative
78	B 2-M	A	Room 109	Window	Frame		Intact	Metal	White	0.13	Negative
79	B 2-M	A	Room 109	Wall			Intact	Concrete	White	0.09	Negative
80	B 2-O	C	Room 109	Wall			Intact	Concrete	White	0.12	Negative
81	B 2-O	В	Room 109	Wall			Intact	Concrete	White	0.03	Negative
82	B 2-O	C	Room 109	Door			Intact	Metal	Tan	0.02	Negative
83	B 2-O	C	Room 109	Door	Frame		Intact	Metal	Tan	.16	Negative
84	B 2-O	A	Staff RR	Wall	Base	Tile	Intact	Ceramic	Pink	3.9	Positive
85	В 2-О	A	Staff RR	Floor	Tile		Intact	Ceramic	Pink	<lod< td=""><td>Negative</td></lod<>	Negative
86	B 2-O	В	Staff RR	Wall	Sink		Intact	Porcelain	White	<lod< td=""><td>Negative</td></lod<>	Negative
87	B 2-O	C	Staff RR	Door			Intact	Metal	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
88	В 2-О	С	Staff RR	Door	Frame		Intact	Metal	Tan	0.13	Negative
89	B 2-O	A	Bathroom	Door			Intact	Metal	Blue	0.17	Negative
90	В 2-О	A	Bathroom	Door	Frame		Intact	Metal	Blue	. 09	Negative
91	В 2-О	С	Bathroom	Floor	Tile		Intact	Ceramic	Pink	<lod< td=""><td>Negative</td></lod<>	Negative
92	В 2-О	С	Bathroom	Wall	Tile		Intact	Ceramic	Pink	7.9	Positive

Project: Vanir- Juvenile Hall-Building 2, 331 The City Drive, Orange, CA 92868

Inspection Date: April 1, 2024

(EPA Regulated Lead-Based Paint= 1.0 mg/cm²) (County of Los Angeles= 0.7mg/cm²) (<LOD= Below Limit of Detection)

			ĺ		Comp	onent					
Sample #	Unit	Side	Location	Test Location	Structure	Member	Paint Condition	Substrate	Color	XRF Reading (mg/cm2)	Classification (pos, neg, inc.)
93	B 2-O	A	Bathroom	Ceiling			Intact	Concrete	White	<lod< td=""><td>Negative</td></lod<>	Negative
94	B 2-O	C	Bathroom	Window	Frame		Intact	Metal	Black	<od< td=""><td>Negative</td></od<>	Negative
95	B 2-O	C	Cell 15	Door	Frame		Intact	Metal	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
96	B 2-O	C	Cell 15	Door			Intact	Metal	Tan	0.27	Negative
97	В 2-О	C	Cell 15	Wall			Intact	Concrete	White	0.28	Negative
98	В 2-О	С	Cell 15	Floor			Intact	Concrete	Brown	<lod< td=""><td>Negative</td></lod<>	Negative
99	B 2-O	A	Cell 15	Window	Screen		Intact	Metal	White	0.14	Negative
100	B 2-O	A	Cell 15	Window	Frame		Intact	Metal	White	0.12	Negative
101	B 2-O	C	Cell 17	Door	Frame		Intact	Metal	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
102	B 2-O	C	Cell 17	Door			Intact	Metal	Tan	0.17	Negative
103	B 2-O	C	Cell 17	Wall			Intact	Concrete	White	0.21	Negative
104	В 2-О	C	Cell 17	Floor			Intact	Concrete	Brown	<lod< td=""><td>Negative</td></lod<>	Negative
105	B 2-O	A	Cell 17	Window	Screen		Intact	Metal	White	0.11	Negative
106	B 2-O	A	Cell 17	Window	Frame		Intact	Metal	White	0.12	Negative
107	B 2-O	A	Cell 12	Door	Frame		Intact	Metal	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
108	B 2-O	A	Cell 12	Door			Intact	Metal	Tan	0.23	Negative
109	B 2-O	A	Cell 12	Wall			Intact	Concrete	White	0.19	Negative
110	B 2-O	A	Cell 12	Floor			Intact	Concrete	Brown	<lod< td=""><td>Negative</td></lod<>	Negative
111	B 2-O	С	Cell 12	Window	Screen		Intact	Metal	White	0.09	Negative
112	B 2-O	C	Cell 12	Window	Frame		Intact	Metal	White	0.11	Negative
113	B 2-O	D	Hall	Door	Frame		Intact	Metal	Tan	0.12	Negative
114	B 2-O	D	Hall	Door			Intact	Metal	Tan	0.21	Negative
115	В 2-О	D	Hall	Floor			Intact	Concrete	Brown	<lod< td=""><td>Negative</td></lod<>	Negative
116	В 2-О	D	Hall	Ceiling			Intact	Concrete	White	0.07	Negative

Project: Vanir- Juvenile Hall-Building 2, 331 The City Drive, Orange, CA 92868

Inspection Date: April 1, 2024

(EPA Regulated Lead-Based Paint= 1.0 mg/cm²) (County of Los Angeles= 0.7mg/cm²) (<LOD= Below Limit of Detection)

					Comp	onent					
Sample #	Unit	Side	Location	Test Location	Structure	Member	Paint Condition	Substrate	Color	XRF Reading (mg/cm2)	Classification (pos, neg, inc.)
117	B2	A	Exterior	Door 1	Door		Intact	Metal	Green	0.08	Negative
118	B2	A	Exterior	Door 1	Frame		Intact	Metal	Green	0.17	Negative
119	B2	A	Exterior	Wall			Intact	Brick	Red	<lod< td=""><td>Negative</td></lod<>	Negative
120	B2	A	Exterior	Door 3	Door		Intact	Metal	Green	0.11	Negative
121	B2	A	Exterior	Door 3	Frame		Intact	Metal	Green	0.23	Negative
122	B2	A	Exterior	Wall	Facia		Fair	Metal	Grey	<lod< td=""><td>Negative</td></lod<>	Negative
123	B2	A	Exterior	Wall, North			Intact	Concrete	White	<lod< td=""><td>Negative</td></lod<>	Negative
124	B2	C	Exterior	Wall			Intact	Brick	Red	<lod< td=""><td>Negative</td></lod<>	Negative
125	B2	C	Exterior	Window 3	Frame		Intact	Metal	Black	0.05	Negative
126	B2	C	Exterior	Window 5	Frame		Intact	Metal	Black	0.11	Negative
127	B2	C	Exterior	Window 7	Frame		Intact	Metal	Black	0.07	Negative
128	B2	A	Exterior	Window 3	Frame		Intact	Metal	Black	0.12	Negative
129	B2	A	Exterior	Window 5	Frame		Intact	Metal	Black	0.09	Negative
130	B2	A	Exterior	Window 7	Frame		Intact	Metal	Black	0.17	Negative
131	B2	C	Exterior	Door	Door		Intact	Metal	Green	0.14	Negative
132	B2	C	Exterior	Door	Frame		Intact	Metal	Green	0.19	Negative
133	B2	D	Exterior	Door 1	Door		Intact	Metal	Green	0.12	Negative
134	B2	D	Exterior	Door 1	Frame		Intact	Metal	Green	0.21	Negative
135	B2	D	Exterior	Door 2	Door		Intact	Metal	Green	0.09	Negative
136	B2	D	Exterior	Door 2	Frame		Intact	Metal	Green	0.19	Negative
137			Calibration	_					Red NIST	0.9	Calibration

Performance Characteristic Sheet

EFFECTIVE DATE: September 24, 2004 EDITION NO.: 1

MANUFACTURER AND MODEL:

Make: Niton LLC
Tested Model: XLp 300
Source: 109Cd

Note: This PCS is also applicable to the equivalent model variations indicated

below, for the Lead-in-Paint K+L variable reading time mode, in the XLi and

XLp series:

XLi 300A, XLi 301A, XLi 302A and XLi 303A. XLp 300A, XLp 301A, XLp 302A and XLp 303A. XLi 700A, XLi 701A, XLi 702A and XLi 703A. XLp 700A, XLp 701A, XLp 702A, and XLp 703A.

Note: The XLi and XLp versions refer to the shape of the handle part of the instrument. The differences in the model numbers reflect other modes available, in addition to Lead-in-Paint modes. The manufacturer states that specifications for these instruments are identical for the source, detector, and detector electronics relative to the Lead-in-Paint mode.

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

Lead-in-Paint K+L variable reading time mode.

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm² (inclusive)

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm² in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm² film).

If readings are outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instruments into control before XRF testing proceeds.

SUBSTRATE CORRECTION:

For XRF results using Lead-in-Paint K+L variable reading time mode, substrate correction is <u>not</u> needed for: Brick, Concrete, Drywall, Metal, Plaster, and Wood

INCONCLUSIVE RANGE OR THRESHOLD:

K+L MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm²)
Results not corrected for substrate bias on any	Brick	1.0
substrate	Concrete	1.0
	Drywall	1.0
	Metal	1.0
	Plaster	1.0
	Wood	1.0

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* ("HUD Guidelines"). Performance parameters shown on this sheet are calculated from the EPA/HUD evaluation using archived building components. Testing was conducted in August 2004 on 133 testing combinations. The instruments that were used to perform the testing had new sources; one instrument's was installed in November 2003 with 40 mCi initial strength, and the other's was installed June 2004 with 40 mCi initial strength.

OPERATING PARAMETERS:

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

SUBSTRATE CORRECTION VALUE COMPUTATION:

Substrate correction is not needed for brick, concrete, drywall, metal, plaster or wood when using Lead-in-Paint K+L variable reading time mode, the normal operating mode for these instruments. If substrate correction is desired, refer to Chapter 7 of the HUD Guidelines for guidance on correcting XRF results for substrate bias.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing. Use the K+L variable time mode readings.

Conduct XRF retesting at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below.

Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family housing a result is defined as the average of three readings. In multifamily housing, a result is a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF results.

Compute the average of all ten re-test XRF results.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

TESTING TIMES:

For the Lead-in-Paint K+L variable reading time mode, the instrument continues to read until it is moved away from the testing surface, terminated by the user, or the instrument software indicates the reading is complete. The following table provides testing time information for this testing mode. The times have been adjusted for source decay, normalized to the initial source strengths as noted above. Source strength and type of substrate will affect actual testing times. At the time of testing, the instruments had source strengths of 26.6 and 36.6 mCi.

Testing Times Using K+L Reading Mode (Seconds)											
		All Data		Median for laboratory-measured lead levels (mg/cm²)							
Substrate	25 th Percentile	Median	75 th Percentile	Pb < 0.25	0.25 <u><</u> Pb<1.0	1.0 <u><</u> Pb					
Wood Drywall	4	11	19	11	15	11					
Metal	4	12	18	9	12	14					
Brick Concrete Plaster	8	16	22	15	18	16					

CLASSIFICATION RESULTS:

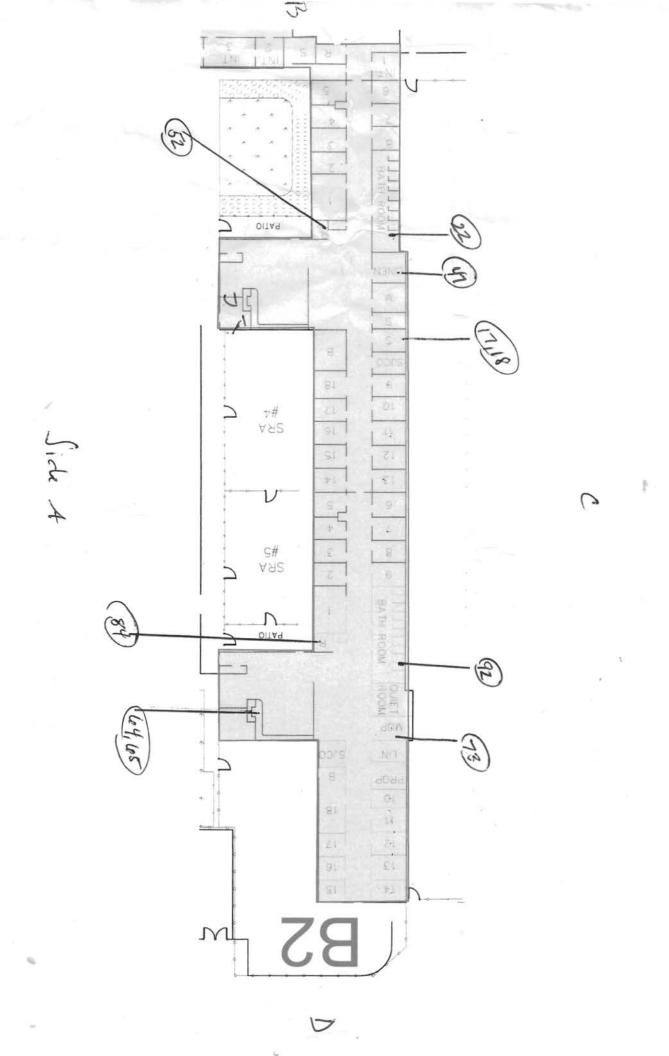
XRF results are classified as positive if they are greater than or equal to the threshold, and negative if they are less than the threshold.

DOCUMENTATION:

A document titled *Methodology for XRF Performance Characteristic Sheets* provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. For a copy of this document call the National Lead Information Center Clearinghouse at 1-800-424-LEAD.

This XRF Performance Characteristic Sheet was developed by the Midwest Research Institute (MRI) and QuanTech, Inc., under a contract between MRI and the XRF manufacturer. HUD has determined that the information provided here is acceptable when used as guidance in conjunction with Chapter 7, Lead-Based Paint Inspection, of HUD's *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*.

APPENDIX 2 SITE DRAWING



Appendix 3

Glossary





Glossary

AALA: American Association for Laboratory Accreditation. Also known as A2LA.

Abatement: A measure or set of measures designed to permanently eliminate lead-based paint hazards or lead-based paint. Abatement strategies include the removal of lead-based paint, enclosure, encapsulation, replacement of building components coated with lead-based paint, removal of lead-contaminated dust, and removal of lead-contaminated soil or overlaying of soil with a durable covering such as asphalt (grass and sod are considered interim control measures). All of these strategies require preparation; cleanup; waste disposal; postabatement clearance testing; recordkeeping; and, if applicable, monitoring. See also Complete abatement and Interim controls.

Abrasion resistance: Resistance of the paint to wear by rubbing or friction; related to both toughness and gloss.

Accessible surface: Any protruding interior or exterior surface, such as an interior window sill, that a young child can mouth or chew.

Accreditation: A formal recognition that an organization, such as a laboratory, is competent to carry out specific tasks or types of tests.

Accredited laboratory: A laboratory that has been evaluated and approved by the National Lead Laboratory Accreditation Program (NLLAP), to perform lead measurement or analysis, usually over a specified period of time.

Accredited training provider: A training provider who meets the standards established by EPA for the training of risk assessors, inspectors, lead-based paint hazard control contractors, and workers.

Accuracy: The degree of agreement between an observed value and an accepted reference value (a "true" value); a data quality indicator. Accuracy includes a combination of random errors (precision) and systematic errors (bias) due to sampling and analysis.

Acrylic: A synthetic resin used in highperformance waterborne coatings; a coating whose binder contains acrylic resins.

Adhesion: The ability of dry paint or other coating to attach to a surface and remain fixed on it without blistering, flaking, cracking, or being susceptible to removal by tape.

Administrative removal: The temporary removal of workers from the job to prevent the concentration of lead in their blood from reaching levels requiring medical removal.

AIHA: American Industrial Hygiene Association.

ALC: See Apparent Lead Concentration.

Aliquot: See Subsample.

Alkali: A chemical, such as Iye, soda, lime, etc., that will neutralize an acid. Oil paint films can be destroyed by alkalies. Some paint removal products contain alkaline substances.

Alkyd: Synthetic resin modified with oil; coating that contains alkyd resins in the binder.

Apparent Lead Concentration (ALC): The x-ray fluorescence (XRF) reading or average of more than one reading on a painted surface. See also XRF analyzer, Substrate Equivalent Lead (SEL), and Corrected Lead Concentration (CLC).

Bare soil: Soil not covered with grass, sod, some other similar vegetation, or paving, including the sand in sandboxes.





Bias: A systematic error in the measurement process. For XRF readings, one source of bias is the substrate effect. See also Substrate effect and XRF analyzer.

Biennial report (for hazardous waste): A report (EPA Form 8700–13A) submitted by generators of hazardous waste to the EPA Regional Administrator. The report is due on March 1 of even-numbered years. The report includes information on the generator's activities during the previous calendar year. The owners and operators of treatment, storage, and disposal facilities must also prepare and submit biennial reports using EPA Form 8700–1313.

Binder: Solid ingredients in a coating that hold the pigment particles in suspension and bind them to the substrate. Binders used in paints and coatings include oil, alkyd, acrylic, latex, and epoxy. The nature and amount of binder determines many of the coating's performance properties—washability, toughness, adhesion, gloss, etc. See also Pigment.

Biological monitoring: The analysis of blood, urine, or both to determine the level of lead contamination in the body. Blood lead levels are expressed in micrograms of lead per deciliter (one-tenth of a liter) of blood, or $\mu g/dL$. They are also expressed in micromoles per liter ($\mu mol/L$).

Blank: A nonexposed sample of the medium being used for testing (i.e., wipe or filter) that is analyzed to determine if the medium has been contaminated with lead (e.g., at the factory or during transport).

Blind sample: A subsample submitted for analysis with a composition and identity known to the submitter but not to the analyst; used to test the analyst's or laboratory's proficiency in conducting measurements. See also Spiked sample.

Blood lead threshold: Any blood lead level greater than or equal to 10 $\mu g/dL$ as defined by the Centers for Disease Control and Prevention. See also Elevated Blood Lead level (EBL) child.

Building component: Any element of a building that may be painted or have dust on its surface, e.g. walls, stair treads, floors, railings, doors, window sills, etc.

Building component replacement: See Replacement.

Cementitious material: A material that is mixed with water, either with or without aggregate, to provide the plasticity, cohesion, and adhesion necessary for the placement and formation of a rigid mass (ASTM Standard C 11).

Centimeter: See cm.

Certification: The process of testing and evaluating against certain specifications the competence of a person, organization, or other entity in performing a function or service, usually for a specified period of time.

Certified: The designation for contractors who have completed training and other requirements to allow them to safely undertake risk assessments, inspections, or abatement work. Risk assessors, inspectors, and abatement contractors should be certified by the appropriate local, State or Federal agency.

Certified Industrial Hygienist (CIH): A person who has passed the 2-day certification exam of the American Board of Industrial Hygiene, and who has at least 4 years of experience in industrial hygiene and a graduate degree or a total of 5 years of experience. See also Industrial hygienist.

Certified reference material (CRM): Reference material that has at least one of its property values established by a technically valid procedure and is accompanied by or traceable to a certificate or other documentation issued by a certifying body. See also Standard reference material.

CFR: See Code of Federal Regulations.

Chalking: The photo-oxidation of paint binders—usually due to weathering—that causes a powder to form on the film surface.





Characteristics (of hazardous waste): EPA has identified four characteristics of hazardous waste: ignitability, corrosivity, reactivity, and toxicity (as determined by the TCLP test). Any solid waste that exhibits at least one of these characteristics may be classified as hazardous under the Resource Conservation and Recovery Act (RCRA), depending on how the waste is produced and what quantities are generated. See also Toxicity Characteristic Leaching Procedure (TCLP).

Chewable surface: See Chewed surface and Accessible surface.

Chewed surface: Any painted surface that shows evidence of having been chewed or mouthed by a young child. A chewed surface is usually a protruding, horizontal part of a building, such as an interior window sill. See also Accessible surface.

CLC: See Corrected Lead Concentration (CLC).

Cleaning: The process of using a HEPA vacuum and wet cleaning agents to remove leaded dust; the process includes the removal of bulk debris from the work area. OSHA prohibits the use of compressed air to clean lead-contaminated dust from a surface.

Clearance examination: Visual examination and collection of environmental samples by an inspector or risk assessor and analysis by an accredited laboratory upon completion of an abatement project, interim control intervention, or maintenance job that disturbs lead-based paint (or paint suspected of being lead-based). The clearance examination is performed to ensure that lead exposure levels do not exceed standards established by the EPA Administrator pursuant to Title IV of the Toxic Substances Control Act, and that any cleaning following such work adequately meets those standards.

Clearance examiner: A person who conducts clearance examinations following lead-based paint hazard control and cleanup work, usually a certified risk assessor or a certified inspector.

cm: Centimeter; 1/100 of a meter.

Code of Federal Regulations (CFR): The codification of the regulations of Federal agencies. The regulations are published in the Federal Register. See also Federal Register (FR).

Cohesion: Ability of a substance to adhere to itself; internal adhesion; the force holding a substance together.

Common area: A room or area that is accessible to all residents in a community (e.g., hallways or lobbies); in general, any area not kept locked.

Competent person: As defined in the OSHA Lead Construction Standard (29 CFR 1926.62), a person who is capable of identifying or predicting hazardous working conditions and work areas, and who has authorization to take prompt, corrective measures to eliminate the hazards. A competent person is not necessarily a risk assessor, inspector, or abatement project supervisor.

Complete abatement: Abatement of all lead-based paint inside and outside a dwelling or building and reduction of any lead-contaminated dust or soil hazards. All of these strategies require preparation; cleanup; waste disposal; postabatement clearance testing; recordkeeping; and, if applicable, reevaluation and on-going monitoring. See also Abatement.

Compliance plan: A document that describes the types of tasks, workers, protective measures, and tools and other materials that may be employed in lead-based paint hazard control to comply with the OSHA Lead Exposure in Construction standard.

Composite sample: A single sample made up of individual subsamples. Analysis of a composite sample produces the arithmetic mean of all subsamples.

Containment: A process to protect workers and the environment by controlling exposures to the lead-contaminated dust and debris created during abatement. See Worksite preparation level.





Contingency plan: A document that describes an organized, planned, and coordinated course of action to be taken during any event that threatens human health or the environment, such as a fire, explosion, or the release of hazardous waste or its constituents from a treatment, storage, or disposal facility.

Corrected Lead Concentration (CLC): The absolute difference between the Apparent Lead Concentration and the Substrate Equivalent Lead. See also Apparent Lead Concentration (ALC) and Substrate Equivalent Lead (SEL).

Detection limit: The minimum amount of a substance that can be reliably measured by a particular method.

Deteriorated lead-based paint: Any lead-based paint coating on a damaged or deteriorated surface or fixture, or any interior or exterior lead-based paint that is peeling, chipping, blistering, flaking, worn, chalking, alligatoring, cracking, or otherwise becoming separated from the substrate.

Digestion blank: A mixture of the reagents used for digesting of paint, soil, or dust matrixes but without the matrix. The blank undergoes all the steps of the analysis, starting with digestion. The blank is used to evaluate the contamination process from a laboratory.

Direct-reading XRF: An analyzer that provides the operator with a display of lead concentrations calculated from the lead K x ray intensity without a graphic of the spectrum usually in mg/cm² (milligrams of lead per square centimeter of painted surface area). See also XRF analyzer.

Disposal (of hazardous waste): The discharge, deposit, injection, dumping, spilling, leaking, or placement of solid or hazardous waste on land or in water so that none of its constituents can pollute the environment by being emitted into the air or discharged into a body of water, including groundwater.

Disposal facility: A facility or part of one in which hazardous waste is placed on land or in water to remain there after the facility closes.

Door mat: See Walk-off mat.

Dust removal: A form of interim control that involves initial cleaning followed by periodic monitoring and recleaning, as needed. Depending on the severity of lead-based paint hazards, dust removal may be the primary activity or just one element of a broader control effort.

Dust trap: A surface, component, or furnishing that serves as a reservoir where dust can accumulate.

EBL child: See Elevated Blood Lead level (EBL) child.

Efflorescence: The salt rising to the surface of a material, such as masonry, plaster, or cement, caused by the movement of water through the material. Paint or encapsulants may not adhere to a surface contaminated with efflorescence.

Elastomeric: A group of pliable, elastic liquid encapsulant coatings. An elastomer is a macromolecular material which, at room temperature, is capable of substantially recovering its size and shape after the force causing its deformation is removed (see ASTM D 907, D-14).

Elevated Blood Lead level (EBL) child: A child who has a blood lead level greater than or equal to 20 μg/dL or a persistent 15 μg/dL. See also Blood lead threshold.

Encapsulation: Any covering or coating that acts as a barrier between lead-based paint and the environment, the durability of which relies on adhesion and the integrity of the existing bonds between multiple layers of paint and between the paint and the substrate. See also Enclosure.

Enclosure: The use of rigid, durable construction materials that are mechanically fastened to the substrate to act as a barrier between the lead-based paint and the environment.





Engineering controls: Measures other than respiratory protection or administrative controls that are implemented at the work site to contain, control, and/or otherwise reduce exposure to lead-contaminated dust and debris usually in the occupational health setting. The measures include process and product substitution, isolation, and ventilation.

Epoxy paint: Paint based on an epoxy resin. An epoxy resin is a cross-linking resin the reactivity of which depends on the epoxide group.

Evaluation: Risk assessment, paint inspection, reevaluation, investigation, clearance examination, or risk assessment screen.

Examination: See Clearance examination.

Examiner: A person certified to conduct clearance examinations or reevaluations, usually a certified inspector or certified risk assessor.

Exposure monitoring: The sampling and analysis of air both inside and outside the work area to determine the degree of worker and resident exposure to lead or other airborne contaminants, often involving air sampling inside a worker's breathing zone.

Exterior work area: For lead hazard control work, the exterior work area includes any exterior building components, such as a porch or stairway; the safety perimeter; and access barriers.

Facility (pertaining to hazardous waste): All buildings, contiguous land, structures, and other appurtenances, as well as any improvements, where lead-based paint or hazardous waste is treated, stored, or disposed. A facility may consist of several different treatment, storage, or disposal units, such as landfills and surface impoundments.

Federal Register (FR): A daily Federal publication that contains proposed and final regulations, rules, and notices.

Fibermat: A semirigid woven material attached with a liquid adhesive to a surface or substrate.

Field blank: A clean sample of the matrix (e.g., filter, or wipe) that has been exposed to the sampling conditions; returned to the laboratory; and analyzed as an environmental sample. Clean quartz sand, air sampling filters and cassettes, and clean wipes can be used as field blanks. The field blank, which should be treated just like the sample, indicates possible sources of contamination.

FR: See Federal Register (FR).

Friction surface: Any interior or exterior surface, such as a window or stair tread, subject to abrasion or friction.

Generator: Any person whose act or operation produces hazardous waste identified or listed in 40 CFR Part 261 or whose act causes a hazardous waste to come under regulation (40 CFR 260.10).

Generator identification number: The unique number assigned by EPA to each generator; transporter of hazardous waste; and treatment, storage, or disposal facility.

Hazardous waste: As defined in EPA regulations (40 CFR 261.3), hazardous waste is solid waste or a combination of solid wastes that because of its quantity; concentration; or physical, chemical, or infectious characteristics may cause or significantly contribute to increases in mortality, serious and irreversible or incapacitating but reversible illnesses, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed. As defined in the regulations, solid waste is hazardous if it meets one of four conditions: (1) exhibits a characteristic of hazardous waste (40 CFR Sections 261.20 through 262.24); (2) has been listed as hazardous (40 CFR Section 261.31 through 261.33); (3) is a mixture containing a listed hazardous waste combined with a nonhazardous solid waste, unless the mixture is specifically excluded or no longer exhibits any of the characteristics of hazardous waste; and (4) is not excluded from regulation as hazardous waste. For lead-based paint abatement





waste, hazardous waste is waste that contains more than 5 ppm of leachable lead as determined by the TCLP test, or is waste that is corrosive, ignitable, or reactive and not otherwise excluded.

Hazardous Waste Manifest: See Manifest.

Heat gun: A device capable of heating leadbased paint causing it to separate from the substrate. For lead hazard control work, the heat stream leaving the gun should not exceed 1,100 °F (some authorities may use a different temperature).

HEPA filter: See High-Efficiency Particulate Air (HEPA) filter.

HEPA/wet wash/HEPA cycle: The cleaning cycle that begins with HEPA vacuuming, followed by a wet wash with a lead-specific cleaning agent, such as trisodium phosphate detergent or another liquid cleaning agent, followed by a final pass with a HEPA vacuum over the surface.

High-Efficiency Particulate Air (HEPA) filter: A filter capable of removing particles of 0.3 microns or larger from air at 99.97 percent or greater efficiency.

High phosphate detergent: See Trisodium phosphate (TSP) detergent.

Impact surface: An interior or exterior surface (such as surfaces on doors) subject to damage by repeated impact or contact.

Incinerator: An enclosed device using controlled flame combustion that neither meets the criteria for classification as a boiler nor is listed as an industrial furnace.

Industrial hygienist: A person having a college or university degree in engineering, chemistry, physics, medicine, or a related physical or biological science who, by virtue of special training, is qualified to anticipate, recognize, evaluate, and control environmental and occupational health hazards and the impact of those hazards on the community and workers.

In-place management: See Interim controls.

Inspection (of paint): A surface-by-surface investigation to determine the presence of lead-based paint (in some cases including dust and soil sampling) and a report of the results.

Inspector: An individual who has completed training from an accredited program and been licensed or certified by the appropriate State or local agency to (1) perform inspections to determine and report the presence of lead-based paint on a surface-by-surface basis through onsite testing, (2) report the findings of such an inspection, (3) collect environmental samples for laboratory analysis, (4) perform clearance testing, and (5) document successful compliance with lead-based paint hazard control requirements or standards.

Interim controls: A set of measures designed to temporarily reduce human exposure or possible exposure to lead-based paint hazards. Such measures include specialized cleaning, repairs, maintenance, painting, temporary containment, and management and resident education programs. Monitoring, conducted by owners, and reevaluations, conducted by professionals, are integral elements of interim control. Interim controls include dust removal; paint film stabilization; treatment of friction and impact surfaces; installation of soil coverings, such as grass or sod; and land-use controls. See also Monitoring, Reevaluation, and Abatement.

Interior window sill: The portion of the horizontal window ledge that protrudes into the interior of the room, adjacent to the window sash when the window is closed; often called the window stool.

Investigation (pertaining to EBL case): The process of determining the source of lead exposure for a child or other resident with an elevated blood lead level. Investigation consists of administration of a questionnaire, comprehensive environmental sampling, case management, and other measures.





Investigator: A person who conducts an investigation of a dwelling where a resident has an elevated blood lead level. The investigator must be proficient in interviewing techniques, environmental sampling, and the interpretation of risk assessment and environmental sampling data.

Laboratory analysis: A determination of the lead content by atomic absorption spectroscopy, inductively coupled plasma emission spectroscopy, or laboratory-based K or L x-ray fluorescence, or an equivalent method.

Landfill: A State-licensed or State-permitted disposal facility that meets municipal solid waste standards (see Federal regulations at 40 CFR 258).

Landfill liner: A continuous layer of natural or synthetic materials placed beneath and sometimes around a surface impoundment, landfill, or landfill cell. The layer restricts the downward or lateral escape of hazardous waste, hazardous waste constituents, or leachate (40 CFR Part 258).

Latex: A waterborne emulsion paint made with synthetic binders, such as 100-percent acrylic, vinyl acrylic, terpolymer, or styrene acrylic; a stable emulsion of polymers and pigment in water.

Lead: Lead includes metallic lead and inorganic and organic compounds of lead.

Lead-based paint: Any paint, varnish, shellac, or other coating that contains lead equal to or greater than 1.0 mg/cm² as measured by XRF or laboratory analysis, or 0.5 percent by weight $(5,000~\mu\text{g/g},\,5,000~\text{ppm},\,\text{or}\,5,000~\text{mg/kg})$ as measured by laboratory analysis. (Local definitions may vary.)

Lead-based paint hazard: A condition in which exposure to lead from lead-contaminated dust, lead-contaminated soil, or deteriorated lead-based paint would have an adverse effect on human health (as established by the EPA Administrator under Title IV of the Toxic Substances Control Act). Lead-based paint hazards

include for example, deteriorated lead-based paint, leaded dust levels above applicable standards, and bare leaded soil above applicable standards.

Lead-based paint hazard control: Activities to control and eliminate lead-based paint hazards, including interim controls, abatement, and complete abatement.

Lead-based paint abatement planner/designer: An individual who has completed an accredited training program on planning and designing lead-based paint abatement projects.

Lead-based paint abatement worker: See Worker.

Lead carbonate: A pigment used in some leadbased paints as a hiding agent; also known as white lead.

Lead-contaminated dust: Surface dust in residences that contains an area or mass concentration of lead in excess of the standard established by the EPA Administrator, pursuant to Title IV of the Toxic Substances Control Act. Until the EPA standards are set, the HUD-recommended clearance and risk assessment standards for leaded dust are 100 $\mu g/ft^2$ on floors, 500 $\mu g/ft^2$ on interior window sills, and 800 $\mu g/ft^2$ on window troughs. The recommended standard for lead hazard screens for floors is 50 $\mu g/ft^2$ and for window troughs is 400 $\mu g/ft^2$.

Lead-contaminated soil: Bare soil on residential property that contains lead in excess of the standard established by the EPA Administrator, pursuant to Title IV of the Toxic Substances Control Act. The HUD-recommended standard and interim EPA guidance is 400 $\mu g/g$ for high-contact play areas and 2,000 $\mu g/g$ in other bare areas of the yard. Soil contaminated with lead at levels greater than or equal to 5,000 $\mu g/g$ should be abated by removal or paving.

Lead-free dwelling: A lead-free dwelling contains no lead-based paint and has interior dust and exterior soil lead levels below the applicable HUD and EPA standards.





Lead hazard screen: A means of determining whether residences in good condition should have a full risk assessment. Also called a risk assessment screen.

Lead-poisoned child: A child with a single blood lead level that is greater than or equal to 20 μ g/dL or consecutive blood lead levels greater than or equal to 15 μ g/dL. Local definitions may vary.

Lead-specific detergent: A cleaning agent manufactured specifically for cleaning and removing leaded dust or other lead contamination.

Leaded dust: See Lead-contaminated dust.

Leaded zinc: A paint primer made from zinc oxide and lead sulfates.

Licensed: Holding a valid license or certification issued by EPA or by an EPA-approved State program pursuant to Title IV of the Toxic Substances Control Act. The license is based on certification for lead-based paint hazard control work. See also Certified.

Listed waste: A hazardous waste that has been placed on one of three lists developed by EPA: nonspecific source wastes, specific source wastes, and commercial chemical products. The lists were developed by examining different types of waste and chemical products to determine if they exhibited one of the four characteristics of hazardous waste (toxicity, corrosivity, ignitability, or reactivity), met the statutory definition of hazardous waste, were acutely toxic or acutely hazardous, or were otherwise toxic.

Maintenance: Work intended to maintain adequate living conditions in a dwelling, which has the potential to disturb lead-based paint or paint that is suspected of being lead-based.

Manifest: The shipping document (EPA Form 8700–22 or a comparable form required by the State or locality) used for identifying the quantity, composition, origin, routing, and destination of hazardous waste during its transport

from the point of generation to the point of treatment, storage, or disposal. Also, a shipping document used to keep track of items being transported. All hazardous waste must be accompanied by a manifest. See Hazardous waste.

Mat: See Walk-off mat.

Matrix blank: A sample of the matrix (paint chips, soil, or dust) that does not contain the analyte lead. This sample goes through the complete analysis, including digestion.

MDL: See Method detection limit (MDL).

Mean: The arithmetic average of a series of numerical data values; for example, the algebraic sum of the data values divided by the number of data values.

Medical removal: The temporary removal of workers from the job because of the occurrence of elevated blood lead levels as defined in the OSHA Lead Exposure in Construction standard (29 CFR 1926.62).

Method blank: See Digestion blank.

Method detection limit (MDL): The minimum concentration of an analyte that, for a given matrix and method, has a 99-percent probability of being identified, qualitatively or quantitatively measured, and reported to be greater than zero.

mg: Milligram; 1/1,000 of a gram.

Microgram: See µg.

Mil: 1/1,000 of an inch; used to measure thickness.

Milligram: See mg.

Monitoring: Surveillance to determine (1) that known or suspected lead-based paint is not deteriorating, (2) that lead-based paint hazard controls, such as paint stabilization, enclosure, or encapsulation have not failed, (3) that structural problems do not threaten the integrity of hazard controls or of known or suspected





lead-based paint, and (4) that dust lead levels have not risen above applicable standards. There are two types of monitoring activities; visual surveys by property owners and reevaluations by certified risk assessors. Visual surveys are generally conducted annually for the purpose of making the first three determinations listed above. Reevaluations are conducted in accordance with the Standard Reevaluation Schedule (or more frequently, if needed) for the purpose of making all four determinations. Monitoring is not required in properties known to be free of lead-based paint. See also Reevaluation and Standard reevaluation schedule.

Monofil: A State-approved landfill that accepts only construction debris.

Mouthable surface: See Chewed surface.

Multifamily housing: Housing that contains more than one dwelling unit per location.

NLLAP requirements: Requirements, specified by the EPA National Lead Laboratory Accreditation Program (NLLAP), for accreditation for the lead analysis of paint, soil, and dust matrixes by an EPA-recognized laboratory accreditation organization.

Offsite paint removal: The process of removing a component from a building and stripping the paint from the component at an offsite paint-stripping facility.

Ongoing monitoring: See Monitoring.

Owner: A person, firm, corporation, guardian, conservator, receiver, trustee, executor, government agency or entity, or other judicial officer who, alone or with others, owns, holds, or controls the freehold or leasehold title or part of the title to property, with or without actually possessing it. This definition includes a vendee who possesses the title, but does not include a mortgagee or an owner of a reversionary interest under a ground rent lease.

Oxidation: A chemical reaction that occurs upon exposure to oxygen. Some coatings cure by oxidation; oxygen enters the liquid coating and crosslinks (attaches) the resin molecules. This film-forming method is also called "air cure" or "air dry." Oxidation also causes rust to form on metals and paint to chalk.

Paint film stabilization: The process of wet scraping, priming, and repainting surfaces coated with deteriorated lead-based paint; paint film stabilization includes cleanup and clearance.

Paint removal: An abatement strategy that entails the removal of lead-based paint from surfaces. For lead hazard control work, this can mean using chemicals, heat guns below 1,100 °F, and certain *contained* abrasive methods. Open flame burning, open abrasive blasting, sandblasting, water blasting, and extensive dry scraping are prohibited paint removal methods. (Methylene chloride paint removers and dry scraping are also not recommended.)

Patch test: A test method or procedure to assess the adhesion of an encapsulant coating to a substrate covered with a layer or layers of lead-based paint.

Personal breathing zone samples: Air samples collected from the breathing zone of a worker (within a 1-foot radius of the worker's mouth) but outside the respirator. The samples are collected with a personal sampling pump operating at 2 liters per minute, drawing air through a 37 mm mixed cellulose ester filter housed in a closed-face cassette with a pore size of 0.8 microns. See Exposure monitoring.

Personal Protective Equipment (PPE): Equipment for protecting the eyes, face, head, and/or extremities; includes protective clothing, respiratory devices, and protective shields; used when hazards capable of causing bodily injury or impairment are encountered.





PHA: See Public Housing Agency (PHA).

Pigment: Insoluble, finely ground materials that give paint its properties of color and hide.

Pigment Volume Concentration (PVC): Pigment volume as a percentage of the total non-volatile ingredients.

Pilot project: In multifamily housing, the testing of a lead-based paint hazard control strategy on a limited number of dwellings, usually those that are vacant, to determine the feasibility of carrying out such a strategy in the entire multifamily housing development; usually involves paint testing, air sampling, wipe sampling, worksite preparation, and a variety of lead-based paint hazard control treatments.

Plastic: See Polyethylene plastic.

Polyethylene plastic: All references to polyethylene plastic refer to 6-mil plastic sheeting or polyethylene bags (or doubled bags if using 4-mil polyethylene bags), or any other thick plastic material shown to demonstrate at least equivalent performance. Plastic used to contain waste should be capable of completely containing the waste and, after being properly sealed, should remain leak-tight with no visible signs of discharge during movement or relocation.

Polyurethane: An exceptionally hard and wear-resistant coating created by the reaction of polyols with a multifunctional isocyanate; often used to seal wood floors following lead-based paint hazard control work and cleaning.

Precision: The degree to which a set of observations or measurements of the same property, usually obtained under similar conditions, conform to themselves; a data quality indicator. Precision is usually expressed in either absolute or relative terms as standard deviation, variance, or range. Often known as "reproducibility."

Primary prevention: The process of controlling lead hazards to prevent exposure *before* a child is poisoned. See Secondary prevention and Tertiary prevention.

Primary standard: A substance or device with a property or value that is unquestionably accepted, within specified limits, in establishing the value of the same or related property of another substance or device.

Public Housing Agency (PHA): Any State, county, municipality, or other government entity or public body, or agency or instrumentality thereof, authorized to engage or assist in the development or operation of housing for low-income families.

PVC: See Pigment Volume Concentration (PVC).

Quality Assurance (QA): An integrated system of activities involving planning, quality control, quality assessment, reporting, and quality improvement to ensure that a product or service meets defined standards of quality within a stated level of confidence.

Quality Control (QC): The overall system of technical activities whose purpose is to measure and control the quality of a product or service so that it meets the needs of users. The aim is to provide a level of quality that is satisfactory, adequate, dependable, and economical.

Random sample: A sample drawn from a population in a way that allows each member of the population to have an equal chance of being selected. Random sampling is a process used to identify locations for the lead-based paint inspections in multifamily dwellings. See also Targeted sample and Worst-case sample.

RCRA: See Resource Conservation and Recovery Act (RCRA).

Reevaluation: In lead hazard control work, the combination of a visual assessment and collection of environmental samples performed by a certified risk assessor to determine if a previously implemented lead-based paint hazard control measure is still effective and if the dwelling remains lead-safe.





Reference material: A material or substance that has at least one sufficiently well established property that can be used to calibrate an apparatus, assess a measurement method, or assign values to materials.

Reinspection: See Reevaluation.

Removal: See Paint removal.

Renovation: Work that involves construction and/or home or building improvement measures such as window replacement, weatherization, remodeling, and repainting.

Replacement: A strategy of abatement that entails the removal of building components coated with lead-based paint (such as windows, doors, and trim) and the installation of new components free of lead-based paint.

Representative sample: A sample of a universe or whole (e.g., waste sample pile, lagoon, groundwater, or waste stream) that can be expected to exhibit the average properties of the entire universe or whole.

Resident: A person who lives in a dwelling.

Resource Conservation and Recovery Act (RCRA): The primary Federal statute governing waste management from generation to disposal. RCRA defines the criteria for hazardous and nonhazardous waste.

Risk assessment: An onsite investigation of a residential dwelling to discover any lead-based paint hazards. Risk assessments include an investigation of the age, history, management, and maintenance of the dwelling, and the number of children under age 6 and women of childbearing age who are residents; a visual assessment; limited environmental sampling (i.e., collection of dust wipe samples, soil samples, and deteriorated paint samples); and preparation of a report identifying acceptable abatement and interim control strategies based on specific conditions.

Risk assessment screen: A type of risk assessment performed only in buildings in good condition using fewer samples but more stringent evaluation criteria (standards) to determine lead hazards.

Risk assessor: A certified individual who has completed training with an accredited training program and who has been certified to (1) perform risk assessments, (2) identify acceptable abatement and interim control strategies for reducing identified lead-based paint hazards, (3) perform clearance testing and reevaluations, and (4) document the successful completion of lead-based paint hazard control activities.

Sample site: A specific spot on a surface being tested for lead concentration.

Saponification: The chemical reaction between alkalies and oil that produces a type of soap. Because of saponification, oil and alkyd coatings will not adhere to masonry substrates, galvanized metals, or zinc-rich primers. Also a form of incompatibility between types of coatings.

Screen: See Risk assessment screen or Lead hazard screen.

Screening: The process of testing children to determine if they have elevated blood lead levels.

Secondary prevention: The process of identifying children who have elevated blood lead levels through screening and controlling or eliminating the sources of further exposure. See also Primary prevention and Tertiary prevention.

SEL: See Substrate Equivalent Lead (SEL).

Site: The land or body of water where a facility is located or an activity is conducted. The site includes adjacent land used in connection with the facility or activity.





Small-quantity generator: Owners, contractors (generators), or both who produce less than 100 kg of hazardous waste per month and accumulate less than 100 kg of hazardous waste at any one time, or who produce less than 1 kg of acutely hazardous waste per month and accumulate less than 1 kg of acutely hazardous waste at any one time.

Soil: See Bare soil.

Solid waste: As defined by RCRA, the term solid waste means garbage; refuse; sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility; or other discarded materials, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations or from community activities. The term does not include solid or dissolved material in domestic sewage or solid or dissolved material in irrigation return flows or industrial discharges (which are point sources subject to permits under the Clean Water Act), nor does the term include special nuclear or byproduct material as defined by the Atomic Energy Act of 1954.

Spectrum analyzer: A type of XRF analyzer that provides the operator with a plot of the energy and intensity, or counts of both K and L x-ray spectra, as well as a calculated lead concentration. See also XRF analyzer.

Spiked matrix: See Spiked sample.

Spiked sample: A sample prepared by adding a known mass of the target analyte (e.g., leaded dust) to a specific amount of matrix sample (e.g., one dust wipe) for which an independent estimate of the target analyte concentration is available. Spiked samples are used to determine, for example, the effect of the matrix on a method's recovery efficiency. See also Blind sample.

Spot-prime: To apply a paint primer to localized areas of exposed substrate.

Standard deviation: A measure of the precision of a reading; the spread of the deviation from the mean. The smaller the standard deviation, the more precise the analysis. The standard deviation is calculated by first obtaining the mean, or the arithmetic average, of all of the readings. A formula is then used to calculate how much the individual values vary from the mean—the standard deviation is the square root of the arithmetic average of the squares of the deviation from the mean. Many hand calculators have an automatic standard deviation function. See also Mean.

Standard reevaluation schedule (SRS): A schedule that determines the frequency that reevaluations should be performed on a property.

Standard reference material (SRM): A certified reference material produced by the National Institute of Standards and Technology (U.S. Department of Commerce) and characterized for absolute content independent of analytical method. See also Certified reference material.

Subsample: A representative portion of a sample. A subsample may be either a field sample or a laboratory sample. A subsample is often combined with other subsamples to produce a composite sample. See also Composite sample.

Substrate: A surface on which paint, varnish, or other coating has been applied or may be applied. Examples of substrates include wood, plaster, metal, and drywall.

Substrate effect: The radiation returned to an XRF analyzer by the paint, substrate, or underlying material, in addition to the radiation returned by any lead present. This radiation, when counted as lead x-rays by an XRF analyzer contributes to substrate equivalent lead (bias). The inspector may have to compensate for this effect when using XRF analyzers. See also XRF analyzer.





Substrate Equivalent Lead (SEL): The XRF measurement taken on an unpainted surface; used to calculate the corrected lead concentration on a surface by using the following formula: Apparent Lead Concentration—Substrate Equivalent Lead = Corrected Lead Concentration. See also Apparent Lead Concentration (ALC), Corrected Lead Concentration (CLC), and XRF analyzer.

Target housing: Any residential unit constructed before 1978, except dwellings that do not contain bedrooms or dwellings that were developed specifically for the elderly or persons with disabilities—unless a child younger than 6 resides or is expected to reside in the dwelling. In the case of jurisdictions that banned the sale or use of lead-based paint before 1978, the Secretary of HUD may designate an earlier date for defining target housing.

Targeted sample: A sample of dwelling units selected from an apartment building or housing development using information supplied by the owner. The units selected are likely to have the greatest probability of containing lead-based paint hazards. A targeted sample is usually selected for performing risk assessments in multifamily housing when it is not possible to select a worst-case sample. See also Worst-case sample and Random sample.

TCLP: See Toxicity Characteristic Leaching Procedure (TCLP).

Tertiary prevention: Providing medical treatment to children with elevated blood lead levels to prevent more serious injury or death.

Testing combination: A unique surface to be tested that is characterized by the room equivalent, component, substrate, and visible color.

Test location: A specific area on a testing combination where XRF instruments will test for lead-based paint.

Toxicity Characteristic Leaching Procedure (TCLP): A laboratory test to determine if excessive levels of lead or other hazardous materials could leach from a sample into groundwater; usually used to determine if waste is hazardous based on its toxicity characteristics.

Trained: Successful completion of a training course in a particular discipline. For lead hazard control work, the training course must be accredited by EPA or by an EPA-approved State program, pursuant to Title IV of the Toxic Substances Control Act.

Transporter: A person who transports hazardous waste, requiring a manifest under 40 CFR Part 260.10, within the United States by air, rail, highway, or water.

Treatment: In residential lead-based paint hazard control work, any method designed to control lead-based paint hazards. Treatment includes interim controls, abatement, and removal. Hazardous waste "treatment" is a method, technique, or process (such as neutralization) that is designed to change the physical, chemical, or biological character or composition of hazardous waste to neutralize it; render it nonhazardous or less hazardous; recover it; make it safer to transport, store, or dispose; or allow for easier recovery, storage, or volume reduction.

Treatment, Storage, and Disposal (TSD) facility: A facility licensed to handle hazardous waste.

Trisodium phosphate (TSP) detergent: A detergent that contains trisodium phosphate.

Trough: See Window trough.

Truck-mounted vacuum unit: A vacuum system whose components, except for hoses and attachments, are located outside the building undergoing dust removal. The exhaust is vented outside so that the interior dust is not disturbed.

TSD: See Treatment, Storage, and Disposal (TSD) facility.

TSP: See Trisodium phosphate (TSP) detergent.

 μ g (or ug): Micrograms. The prefix micromeans 1/1,000,000 (or one-millionth); a microgram is 1/1,000,000 of a gram and 1/1,000 of a milligram; equal to about 35/1,000,000,000 (35 billionths) of an ounce (an ounce is equal to 28,400,000 μ g).





Urethane-modified alkyd: An alkyd molecule that has been chemically modified by the incorporation of a urethane; a coating, often a varnish, that uses a urethane-modified alkyd resin in the binder.

Useful life: The life expectancy of a coating before it requires refinishing or some other form of maintenance.

VOC: See Volatile Organic Compound (VOC).

Volatile Organic Compound (VOC): Substances that vaporize or evaporate from a coating during the coating or curing process.

Walk-off mat: A washable, fibrous material (preferably with a rubber or vinyl backing) positioned at main entryways to reduce transport of lead dust and lead soil into a building or residence.

White lead: A white pigment, usually lead carbonate. See also Lead carbonate.

Window sill: See Interior window sill.

Window stool: See Interior window sill.

Window trough: For a typical double-hung window, the portion of the exterior window sill between the interior window sill (or stool) and the frame of the storm window. If there is no storm window, the window trough is the area that receives both the upper and lower window sashes when they are both lowered. Sometimes inaccurately called the window "well." See also Window well.

Window well: The space that provides exterior access and/or light to a window that is below grade, i.e., below the level of the surrounding earth or pavement. See also Window trough.

Worker: An individual who has completed training in an accredited program to perform lead-based paint hazard control in housing.

Worksite: Any interior or exterior area where lead-based paint hazard control work takes place.

Worksite preparation level: A set of measures designed to protect residents and the environment from leaded dust, paint chips, or other forms of lead contamination through the erection of barriers and the establishment of access control, resident relocation or movement restrictions, warning signs, ventilation, and other measures.

Worst-case sample: A sample of dwelling units having the greatest probability of containing lead-based paint hazards selected by a risk assessor on the basis of a visual examination of all dwelling units in a housing development or apartment building. See also Targeted sample and Random sample.

XRF analyzer: An instrument that determines lead concentration in milligrams per square centimeter (mg/cm²) using the principle of x-ray fluorescence (XRF). Two types of XRF analyzers are used—direct readers and spectrum analyzers. In these *Guidelines*, the term XRF analyzer only refers to portable instruments manufactured to analyze paint, and does not refer to laboratory-grade units or portable instruments designed to analyze soil.

Appendix 4

Inspector Certification



STATE OF CALIFORNIA DEPARTMENT OF PUBLIC HEALTH



LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:

CERTIFICATE TYPE:

NUMBER:

EXPIRATION DATE:

Lead Inspector/Assessor

LRC-00000459

5/31/2025

Lead Project Monitor

LRC-00000458

5/31/2025

Michelle Ehresman

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD

Appendix 5

CDPH 8552 Inspection Form

LEAD HAZARD EVALUATION REPORT

Section 1 — Date of Lead Haza	rd Evaluation 4/1/24				
Section 2 — Type of Lead Haza	rd Evaluation (Check	one box only)			
✓ Lead Inspection Risk	assessment Cl	earance Inspection	Other (specify)		
Section 3 — Structure Where L	ead Hazard Evaluation	n Was Conducted			
Address [number, street, apartment (if applicable)]		City	County	Zip Code	
331 The City Drive (Building 2)		Orange	Orange	92868	
Construction date (year) of structure Unknown Type of structure Multi-unit building Single family dwelling		School or daycare Other	Yes	Children living in structure? Yes No Don't Know	
Section 4 — Owner of Structur	e (if business/agency.	list confact person)			
Name	- \ bacillosolagolloy,	voiltage pologil	Telephone number		
c/o Vanir Contruction (So		916-677-7024			
Address [number, street, apartment (<u> </u>	City	State	Zip Code	
4540 Duckhorn Drive, Suite 300		Sacramento	CA	95834	
Section 5 — Results of Lead H		ok all that apply)			
No lead hazards detected Section 6 — Individual Conductor Name Michelle Ehresman Address [number, street, apartment (7742 Arjons Drive CDPH certification number LRC 0459 Name and CDPH certification number	if applicable)]	City San Diego gnature	Telephone number 858-537-399 State CA	Other Lead containing ceramic tile 29 Zip Code 92126 Date 4/22/24	
A. A foundation diagram or sketch lead-based paint; B. Each testing method, device, a C. All data collected, including questions.	and sampling procedure	used;		•	
First copy and attachments retained Second copy and attachments retain	•	Third copy only (no a California Departmer Childhood Lead Pois	nt of Public Health		
		850 Marina Bay Park Richmond, CA 94804 Fax: (510) 620-5656	way, Building P, Thire		

Appendix 6

Renovate Right



AUTION CAUTION

CAUTION

CAUTION

CAUTION







1-800-424-LEAD (5323) www.epa.gov/getleadsafe EPA-740-K-10-001 April 2010



Important lead hazard information for families, child care providers and schools.





IT'S THE LAW!

Federal law requires contractors that disturb painted surfaces in homes, child care facilities and schools, built before 1978 to be certified and follow specific work practices to prevent lead contamination. Always ask to see your contractor's certification.

Federal law requires that individuals receive certain information before renovating more than six square feet of painted surfaces in a room for interior projects or more than twenty square feet of painted surfaces for exterior projects or window replacement or demolition in housing, child care facilities and schools built before 1978.

- Homeowners and tenants: renovators must give you this pamphlet before starting work.
- Child care facilities, including preschools and kindergarten classrooms, and the families of children under six years of age that attend those facilities: renovators must provide a copy of this pamphlet to child care facilities and general renovation information to families whose children attend those facilities.



WHO SHOULD READ THIS PAMPHLET?

This pamphlet is for you if you:

- Reside in a home built before 1978.
- Own or operate a child care facility, including preschools and kindergarten classrooms, built before 1978, or
- Have a child under six years of age who attends a child care facility built before 1978.

You will learn:

- Basic facts about lead and your health.
- How to choose a contractor, if you are a property owner.
- What tenants, and parents/guardians of a child in a child care facility or school should consider.
- How to prepare for the renovation or repair job.
- What to look for during the job and after the job is done.
- Where to get more information about lead.

This pamphlet is not for:

- Abatement projects. Abatement is a set of activities aimed specifically at
 eliminating lead or lead hazards. EPA has regulations for certification and training of
 abatement professionals. If your goal is to eliminate lead or lead hazards, contact the
 National Lead Information Center at 1-800-424-LEAD (5323) for more information.
- "Do-it-yourself" projects. If you plan to do renovation work yourself, this document is a good start, but you will need more information to complete the work safely. Call the National Lead Information Center at 1-800-424-LEAD (5323) and ask for more information on how to work safely

in a home with lead-based paint.

Contractor education. Contractors
 who want information about working
 safely with lead should contact
 the National Lead Information
 Center at 1-800-424-LEAD (5323)
 for information about courses and
 resources on lead-safe work practices.



RENOVATING, REPAIRING, OR PAINTING?



- Is your home, your building, or the child care facility or school your children attend being renovated, repaired, or painted?
- Was your home, your building, or the child care facility or school where your children under six years of age attend built before 1978?

If the answer to these questions is YES, there are a few important things you need to know about lead-based paint.

This pamphlet provides basic facts about lead and information about lead safety when work is being done in your home, your building or the child care facility or school your children attend.

The Facts About Lead

- Lead can affect children's brains and developing nervous systems, causing reduced IQ, learning disabilities, and behavioral problems. Lead is also harmful to adults.
- Lead in dust is the most common way people are exposed to lead. People can also get lead in their bodies from lead in soil or paint chips. Lead dust is often invisible.
- Lead-based paint was used in more than 38 million homes until it was banned for residential use in 1978.
- Projects that disturb painted surfaces can create dust and endanger you and your family. Don't let this happen to you. Follow the practices described in this pamphlet to protect you and your family.

LEAD AND YOUR HEALTH

Lead is especially dangerous to children under six years of age.

Lead can affect children's brains and developing nervous systems, causing:

- Reduced IQ and learning disabilities.
- · Behavior problems.

Even children who appear healthy can have dangerous levels of lead in their bodies.

Lead is also harmful to adults. In adults, low levels of lead can pose many dangers, including:

- High blood pressure and hypertension.
- Pregnant women exposed to lead can transfer lead to their fetuses. Lead gets into the body when it is swallowed or inhaled.
- People, especially children, can swallow lead dust as they eat, play, and do other normal hand-to-mouth activities.
- People may also breathe in lead dust or fumes if they disturb lead-based paint.
 People who sand, scrape, burn, brush or blast or otherwise disturb lead-based paint risk unsafe exposure to lead.

What should I do if I am concerned about my family's exposure to lead?

- Call your local health department for advice on reducing and eliminating exposures to lead inside and outside your home, child care facility or school.
- Always use lead-safe work practices when renovation or repair will disturb painted surfaces.
- A blood test is the only way to find out if you or a family member already has lead poisoning. Call your doctor or local health department to arrange for a blood test.

For more information about the health effects of exposure to lead, visit the EPA lead website at www.epa.gov/lead/pubs/leadinfo.htm or call 1-800-424-LEAD (5323).

There are other things you can do to protect your family every day.

- Regularly clean floors, window sills, and other surfaces.
- Wash children's hands, bottles, pacifiers, and toys often.
- Make sure children eat a healthy, nutritious diet consistent with the USDA's dietary guidelines, that helps protect children from the effects of lead.
- Wipe off shoes before entering house.



WHERE DOES THE LEAD COME FROM?

Dust is the main problem.

The most common way to get lead in the body is from dust. Lead dust comes from deteriorating lead-based paint and lead-contaminated soil that gets tracked into your home. This dust may accumulate to unsafe levels. Then, normal hand to-mouth activities, like playing and eating (especially in young children), move that dust from surfaces like floors and window sills into the body.

Home renovation creates dust.

Common renovation activities like sanding, cutting, and demolition can create hazardous lead dust and chips.

Proper work practices protect you from the dust.

The key to protecting yourself and your family during a renovation, repair or painting job is to use lead-safe work practices such as containing dust inside the work area, using dust-minimizing work methods, and conducting a careful cleanup, as described in this pamphlet.

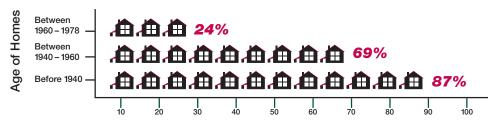
Other sources of lead.

Remember, lead can also come from outside soil, your water, or household items (such as lead-glazed pottery and lead crystal). Contact the National Lead Information Center at 1-800-424-LEAD (5323) for more information on these sources.



CHECKING YOUR HOME FOR LEAD-BASED PAINT

Percentage of Homes Likely to Contain Lead



Older homes, child care facilities, and schools are more likely to contain lead-based paint.

Homes may be single-family homes or apartments. They may be private, government-assisted, or public housing. Schools are preschools and kindergarten classrooms. They may be urban, suburban, or rural.

You have the following options:

You may decide to assume your home, child care facility, or school contains lead. Especially in older homes and buildings, you may simply want to assume lead-based paint is present and follow the lead-safe work practices described in this brochure during the renovation, repair, or painting job.

You can hire a certified professional to check for lead-based paint.

These professionals are certified risk assessors or inspectors, and can determine if your home has lead or lead hazards.

- A certified inspector or risk assessor can conduct an inspection telling you whether your home, or a portion of your home, has lead-based paint and where it is located. This will tell you the areas in your home where lead-safe work practices are needed.
- A certified risk assessor can conduct a risk assessment telling you if your home currently has any lead hazards from lead in paint, dust, or soil. The risk assessor can also tell you what actions to take to address any hazards.
- For help finding a certified risk assessor or inspector, call the National Lead Information Center at 1-800-424-LEAD (5323).

You may also have a certified renovator test the surfaces or components being disturbed for lead using a lead test kit. Test kits must be EPA-recognized and are available at hardware stores. They include detailed instructions for their use.

FOR PROPERTY OWNERS

You have the ultimate responsibility for the safety of your family, tenants, or children in your care.

This means properly preparing for the renovation and keeping persons out of the work area (see p. 8). It also means ensuring the contractor uses lead-safe work practices.

Federal law requires that contractors performing renovation, repair and painting projects that disturb painted surfaces in homes, child care facilities, and schools built before 1978 be certified and follow specific work practices to prevent lead contamination.

Make sure your contractor is certified, and can explain clearly the details of the job and how the contractor will minimize lead hazards during the work.

- You can verify that a contractor is certified by checking EPA's website at epa.gov/getleadsafe or by calling the National Lead Information Center at 1-800-424-LEAD (5323). You can also ask to see a copy of the contractor's firm certification.
- Ask if the contractor is trained to perform lead-safe work practices and to see a copy of their training certificate.
- Ask them what lead-safe methods they will use to set up and perform the job in your home, child care facility or school.
- Ask for references from at least three recent jobs involving homes built before 1978, and speak to each personally.

Always make sure the contract is clear about how the work will be set up, performed, and cleaned.

- Share the results of any previous lead tests with the contractor.
- You should specify in the contract that they follow the work practices described on pages 9 and 10 of this brochure.
- The contract should specify which parts of your home are part of the work area and specify which lead-safe work practices will be used in those areas. Remember, your contractor should confine dust and debris to the work area and should minimize spreading that dust to other areas of the home.
- The contract should also specify that the contractor will clean the work area, verify that it was cleaned adequately, and re-clean it if necessary.

If you think a worker is not doing what he is supposed to do or is doing something that is unsafe, you should:

- Direct the contractor to comply with regulatory and contract requirements.
- Call your local health or building department, or
- Call EPA's hotline 1-800-424-LEAD (5323).

If your property receives housing assistance from HUD (or a state or local agency that uses HUD funds), you must follow the requirements of HUD's Lead-Safe Housing Rule and the ones described in this pamphlet.

FOR TENANTS AND FAMILIES OF CHILDREN UNDER SIX YEARS OF AGE IN CHILD CARE FACILITIES AND SCHOOLS

You play an important role ensuring the ultimate safety of your family.

This means properly preparing for the renovation and staying out of the work area (see p. 8).

Federal law requires that contractors performing renovation, repair and painting projects that disturb painted surfaces in homes built before 1978 and in child care facilities and schools built before 1978, that a child under six years of age visits regularly, to be certified and follow specific work practices to prevent lead contamination.

The law requires anyone hired to renovate, repair, or do painting preparation work on a property built before

1978 to follow the steps described on pages 9 and 10 unless the area where the work will be done contains no lead-based paint.

If you think a worker is not doing what he is supposed to do or is doing something that is unsafe, you should:

- · Contact your landlord.
- · Call your local health or building department, or
- Call EPA's hotline 1-800-424-LEAD (5323).

If you are concerned about lead hazards left behind after the job is over, you can check the work yourself (see page 10).



7

PREPARING FOR A RENOVATION

The work areas should not be accessible to occupants while the work occurs.

The rooms or areas where work is being done may need to be blocked off or sealed with plastic sheeting to contain any dust that is generated. Therefore, the contained area may not be available to you until the work in that room or area is complete, cleaned thoroughly, and the containment has been removed. Because you may not have access to some areas during the renovation, you should plan accordingly.

You may need:

- Alternative bedroom, bathroom, and kitchen arrangements if work is occurring in those areas of your home.
- A safe place for pets because they too can be poisoned by lead and can track lead dust into other areas of the home.
- A separate pathway for the contractor from the work area to the outside in order to bring materials in and out of the home. Ideally, it should not be through the same entrance that your family uses.
- A place to store your furniture. All furniture and belongings may have to be moved from the work area while the work is being done. Items that can't be moved, such as cabinets, should be wrapped in plastic.
- To turn off forced-air heating and air conditioning systems while the work is being done. This prevents dust from spreading through vents from the work area to the rest of your home. Consider how this may affect your living arrangements.

You may even want to move out of your home temporarily while all or part of the work is being done.

Child care facilities and schools may want to consider alternative accommodations for children and access to necessary facilities.



DURING THE WORK

Federal law requires contractors that are hired to perform renovation, repair and painting projects in homes, child care facilities, and schools built before 1978 that disturb painted surfaces to be certified and follow specific work practices to prevent lead contamination.

The work practices the contractor must follow include these three simple procedures, described below:

- 1. Contain the work area. The area must be contained so that dust and debris do not escape from that area. Warning signs must be put up and plastic or other impermeable material and tape must be used as appropriate to:
 - Cover the floors and any furniture that cannot be moved.
 - Seal off doors and heating and cooling system vents.

These will help prevent dust or debris from getting outside the work area.

2. Avoid renovation methods that generate large amounts of lead-contaminated dust.

Some methods generate so much lead-contaminated dust that their use is prohibited.

They are:

- · Open flame burning or torching.
- Sanding, grinding, planing, needle gunning, or blasting with power tools and equipment not equipped with a shroud and HEPA vacuum attachment.
- Using a heat gun at temperatures greater than 1100°F.

There is no way to eliminate dust, but some renovation methods make less dust than others. Contractors may choose to use various methods to minimize dust generation, including using water to mist areas before sanding or scraping; scoring paint before separating components; and prying and pulling apart components instead of breaking them.

- **3. Clean up thoroughly.** The work area should be cleaned up daily to keep it as clean as possible. When all the work is done, the area must be cleaned up using special cleaning methods before taking down any plastic that isolates the work area from the rest of the home. The special cleaning methods should include:
 - Using a HEPA vacuum to clean up dust and debris on all surfaces, followed by
 - Wet wiping and wet mopping with plenty of rinse water.

When the final cleaning is done, look around. There should be no dust, paint chips, or debris in the work area. If you see any dust, paint chips, or debris, the area must be re-cleaned.

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FOR PROPERTY OWNERS: AFTER THE WORK IS DONE

When all the work is finished, you will want to know if your home, child care facility, or school has been cleaned up properly. Here are some ways to check.

Ask about your contractor's final cleanup check. Remember, lead dust is often invisible to the naked eye. It may still be present even if you cannot see it. The contractor must use disposable cleaning cloths to wipe the floor of the work area and compare them to a cleaning verification card to determine if the work area was adequately cleaned.

To order a cleaning verification card and detailed instructions visit the EPA lead website at www.epa.gov/lead or contact the National Lead Information Center at 1-800-424-LEAD (5323) or visit their website at www.epa.gov/lead/nlic.htm.

You also may choose to have a lead-dust test. Lead-dust tests are wipe samples sent to a laboratory for analysis.

- You should specify in your contract that a lead-dust test will be done. In this case, make it clear who will do the testing.
- Testing should be done by a lead professional.

If you choose to do the testing, some EPA-recognized lead laboratories will send you a kit that allows you to collect samples and send them back to the lab for analysis.

Contact the National Lead Information Center at 1-800-424-LEAD (5323) for lists of qualified professionals and EPA-recognized lead labs.

If your home, child care facility, or school fails the dust test, the area should be re-cleaned and tested again.

Where the project is done by contract, it is a good idea to specify in the contract that the contractor is responsible for re-cleaning if the home, child care facility, or school fails the test.



FOR ADDITIONAL INFORMATION

You may need additional information on how to protect yourself and your children while a job is going on in your home, your building, or child care facility.

The National Lead Information Center at 1-800-424-LEAD (5323) or www.epa.gov/lead/nlic.htm can tell you how to contact your state, local, and/or tribal programs or get general information about lead poisoning prevention.

- State and tribal lead poisoning prevention or environmental protection programs can provide information about lead regulations
- and potential sources of financial aid for reducing lead hazards. If your state or local government has requirements more stringent than those described in this pamphlet, you must follow those requirements.
- Local building code officials can tell you the regulations that apply to the renovation work that you are planning.
- State, county, and local health departments can provide information about local programs, including assistance for lead-poisoned children and advice on ways to get your home checked for lead.

The National Lead Information Center can also provide a variety of resource materials, including the following guides to lead-safe work practices. Many of these materials are also available at www.epa.gov/lead/pubs/brochure.htm.

- Steps to Lead Safe Renovation, Repair and Painting.
- Protect Your Family from Lead in Your Home
- Lead in Your Home: A Parent's Reference Guide





For the hearing impaired, call the Federal Information Relay Service at 1-800-877-8339 to access any of the phone numbers in this brochure.

10 11

OTHER FEDERAL AGENCIES

EPA Regional Offices

EPA addresses residential lead hazards through several different regulations. EPA requires training and certification for conducting abatement and renovations, education about hazards associated with renovations, disclosure about known lead paint and lead hazards in housing, and sets lead-paint hazard standards.

Your Regional EPA Office can provide further information regarding lead safety and lead protection programs at **epa.gov/lead**.

Region 1

(Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island, Vermont) Regional Lead Contact U.S. EPA Region 1 Suite 1100 One Congress Street Boston, MA 02114-2023 (888) 372-7341

Region 2

(New Jersey, New York, Puerto Rico, Virgin Islands) Regional Lead Contact U.S. EPA Region 2 2890 Woodbridge Avenue Building 205, Mail Stop 225 Edison, NJ 08837-3679 (732) 321-6671

Region 3

(Delaware, Maryland, Pennsylvania, Virginia, Washington, DC, West Virginia) Regional Lead Contact U.S. EPA Region 3 1650 Arch Street Philadelphia, PA 19103-2029 (215) 814-5000

Region 4

(Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee) Regional Lead Contact U.S. EPA Region 4 61 Forsyth Street, SW Atlanta, GA 30303-8960 (404) 562-9900

Region 5

(Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin) Regional Lead Contact U.S. EPA Region 5 77 West Jackson Boulevard Chicago, IL 60604-3507 (312) 886-6003

Region 6

(Arkansas, Louisiana, New Mexico, Oklahoma, Texas) Regional Lead Contact U.S. EPA Region 6 1445 Ross Avenue, 12th Floor Dallas, TX 75202-2733 (214) 665-6444

Region 7

(Iowa, Kansas, Missouri, Nebraska) Regional Lead Contact U.S. EPA Region 7 901 N. 5th Street Kansas City, KS 66101 (913) 551-7003

Region 8

(Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming) Regional Lead Contact U.S. EPA Region 8 1595 Wynkoop Street Denver, CO 80202 (303) 312-6312

Region 9

(Arizona, California, Hawaii, Nevada) Regional Lead Contact U.S. Region 9 75 Hawthorne Street San Francisco, CA 94105 (415) 947-8021

Region 10

(Alaska, Idaho, Oregon, Washington) Regional Lead Contact U.S. EPA Region 10 1200 Sixth Avenue Seattle, WA 98101-1128 (206) 553-1200

CPSC

The Consumer Product Safety
Commission (CPSC) protects the public
from the unreasonable risk of injury or
death from 15,000 types of consumer
products under the agency's jurisdiction.
CPSC warns the public and private
sectors to reduce exposure to lead and
increase consumer awareness. Contact
CPSC for further information regarding
regulations and consumer product safety.

CPSC

4330 East West Highway Bethesda, MD 20814 Hotline 1-(800) 638-2772 www.cpsc.gov

CDC Childhood Lead Poisoning Prevention Branch

The Centers for Disease Control and Prevention (CDC) assists state and local childhood lead poisoning prevention programs to provide a scientific basis for policy decisions, and to ensure that health issues are addressed in decisions about housing and the environment. Contact CDC Childhood Lead Poisoning Prevention Program for additional materials and links on the topic of lead.

CDC Childhood Lead Poisoning Prevention Branch

4770 Buford Highway, MS F-40 Atlanta, GA 30341 (770) 488-3300 www.cdc.gov/nceh/lead

HUD Office of Healthy Homes and Lead Hazard Control

The Department of Housing and Urban Development (HUD) provides funds to state and local governments to develop cost-effective ways to reduce lead-based paint hazards in America's privately-owned low-income housing. In addition, the office enforces the rule on disclosure of known lead paint and lead hazards in housing, and HUD's lead safety regulations in HUD-assisted housing, provides public outreach and technical assistance, and conducts technical studies to help protect children and their families from health and safety hazards in the home. Contact the HUD Office of Healthy Homes and Lead Hazard Control for information on lead regulations, outreach efforts, and lead hazard control research and outreach grant programs.

U.S. Department of Housing and Urban Development

Office of Healthy Homes and Lead Hazard Control 451 Seventh Street, SW, Room 8236 Washington, DC 20410-3000 HUD's Lead Regulations Hotline (202) 402-7698 www.hud.gov/offices/lead/

12 13



SAMPLE PRE-RENOVATION FORM

This sample form may be used by renovation firms to document compliance with the Federal pre-renovation education and renovation, repair, and painting regulations.

Occupant Confirmation Pamphlet Receipt

□ I have received a copy of the lead hazard info potential risk of the lead hazard exposure fro dwelling unit. I received this pamphlet befor	om renovation activity to be performed in my				
Printed Name of Owner-occupant					
Signature of Owner-occupant	Signature Date				
Renovator's Self Certification Option (for tend Instructions to Renovator: If the lead hazard int signature was not obtainable, you may check t	formation pamphlet was delivered but a tenant				
□ Declined – I certify that I have made a good faith effort to deliver the lead hazard information pamphlet to the rental dwelling unit listed below at the date and time indicated and that the occupant declined to sign the confirmation of receipt. I further certify that I have left a copy of the pamphlet at the unit with the occupant.					
was unavailable to sign the confirmation of r	ave made a good faith effort to deliver the lead lwelling unit listed below and that the occupant receipt. I further certify that I have left a copy of the door or by (fill in how pamphlet was left).				
Printed Name of Person Certifying Delivery	Attempted Delivery Date				
Signature of Person Certifying Lead Pamphlet	Delivery				
Unit Address					

Note Regarding Mailing Option — As an alternative to delivery in person, you may mail the lead hazard information pamphlet to the owner and/or tenant. Pamphlet must be mailed at least seven days before renovation. Mailing must be documented by a certificate of mailing from the post office.

COMPREHENSIVE ASBESTOS SURVEY REPORT FOR DEMOLITION

PROJECT NAME:

ORANGE COUNTY JUVENILE HALL-BUILDING 3



PROJECT ADDRESS:

331 The City Drive, S. Orange, California 92868

Prepared for:

Mr. Scott L. Battles Vanir Construction Management, Inc 4540 Duckhorn Drive, Suite 300 Sacramento, California 95834

Prepared by:

MTGL, Inc. 7742 Arjons Dr. San Diego, California 92126 858-537-3999

Project Number:

SDPE-24-061.1CT

Report By:

Michelle Ehresman, CAC

CAC Certification Number: 14-5323 CAC Expiration Date: November 19, 20204

Date of Report:

April 22, 2024

Version 1.0

TABLE OF CONTENTS

INTRODUCTIONSection 1
General Information
Project Information
Site/Building Description
Suspect Materials Observed
INVESTIGATION LIMITATIONS & WARRANTYSection 2
ASBESTOS SURVEY METHODOLOGYSection 3
General References
Visual Inspection
Homogeneous Material Classifications
Sampling Procedures
Laboratory Procedures
Method of Analysis
Laboratory Quality Control Program
ASBESTOS SURVEY OBSERVATIONS AND FINDINGS Section 4
Summary
Table 1: Positively Identified Materials that Contain Asbestos (ACM and ACCM) and
Assessment of Material Condition.
Table 2: Materials found to be Negative for Asbestos
General Information
Environmental Protection Agency (EPA)
California Occupational Safety & Health Agency (Cal/OSHA)
National Emission Standards for Hazardous Air Pollutants (NESHAP)
CONCLUSIONS & RECOMMENDATIONS Section 5
APPENDICES Section 6
Appendix 1 – Asbestos Laboratory Results & Chain of Custodies
Appendix 2 – Site Map with Sample Location
Appendix 3 – Photo Documentation
Appendix 4 – Inspector Certifications

SECTION 1 INTRODUCTION

GENERAL INFORMATION

MTGL, Inc. was retained to conduct a survey for suspect asbestos containing materials. The intent of this survey is to pre-determine the presence of EPA/OSHA regulated Asbestos Containing Materials and Asbestos Containing Construction Materials (ACCM) that may need to be addressed prior to scheduled demolition and/or renovation activities.

MTGL's scope of work was limited to the following:

- Review of project drawings.
- Conduct a pre-construction asbestos inspection limited to Client specified locations in accordance with NESHAP Regulations and the collection of bulk samples of suspect ACM.
- Submit samples to a NVLAP accredited laboratory for analysis of asbestos fiber content using polarized-light microscopy.
- Prepare report with material description, sampling locations, analytical results, and recommendations for proper handling/abatement prior to demolition and/or renovation activities.

PROJECT INFORMATION

Survey Requested/Authorized By: Mr. Scott L. Battles

Type of Survey Requested: Full Comrehensive

Destructive Sampling Allowed by Client: Yes

Project Name: ORANGE COUNTY JUVENILE HALL BUILDING 10

Project Address: 331 The City of Orange Dr. S in the city of Orange in the State of California.

Date of Inspection: March 29, 2024 to April 2, 2024

AHERA Certified Building Inspector Name: Darla Beery

AHERA Certified Building Inspector Number: 2023ABCA171101

Additional AHERA Certified Building Inspector Name: Michelle Ehresman

Additional AHERA Certified Building Inspector Number: ABIR0727230010N35227

Local Air District: South Coast Air Quality Management District (Sampling method, lab

qualifications, lab analytical procedures, and lab method of analysis were performed in compliance with Rule 1403 (d)(1)(A) and 40 CFR Part 763 -

Asbestos. requirments)

Laboratory: EMLab P&K, LLC – ID#: 3592263/3600730

9445 Farnham St, Suite 103, San Diego, CA 92123

(866) 888-6653 Fax (623) 780-7695 www.emlab.com

Laboratory Sample Analysis Method: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA

METHOD 600/R-93-116, SOP EM-AS-S-1267)

Sampling Protocols: EPA 40CFR 763.86 Methods

SITE/BUILDING DESCRIPTION

Structure Type: Commercial Facility

Year Built: Unknown

Date of known additions: Unknown

Building Structural Damage (If Any): None Observed

Approximate Square Feet of Surveyed Area: 10,000

Structure Frame: Wood

If other, describe: None

Structure Foundation: Concrete Slab On Grade

If other, describe: None

Number of Floors: 1

Building Occupied: No

SUSPECT MATERIALS OBSERVED

Suspect Materials Observed During the Asbestos Survey Conducted

- 12"x12" Acoustic Ceiling Tile w/Mastic and 2'x4' Fissured Ceiling Tiles
- Epoxy Flooring
- Concrete Block Wall and Concrete Floor
- Carpet Glue
- Ceiling Plaster
- Concrete Wall
- Ceramic Wall Tile and Ceramic Floor Tile
- Pipe Elbow Insulation and Fiberglass Pipe Wrap
- Concrete Texture Coat (Soffit)
- Asphalt
- Exterior Concrete Block
- Exterior Stone Wall
- Concrete Sidewalk
- Silver Coated Rolled Roofing and Roof Mastic
- HVAC Seam Caulk

Inaccessible Materials Presumed to be Asbestos Content: None

SECTION 2 INVESTIGATION LIMITATIONS & WARRANTY

Per the agreement between The Client and MTGL, Inc., the scope of services was performed as described in this report.

The intent of this survey is to pre-determine the presence of EPA/OSHA regulated asbestos containing building materials that may need to be addressed prior to scheduled demolition and/or renovation activities.

INVESTIGATION LIMITATIONS

MTGL, Inc. did not conduct testing within interstitial wall cavities, ceiling plenums, HVAC ventilation systems or crawlspaces or other locations of the facility, outside of the Client specified areas.

The findings of this report are valid as of the date of the survey and sample collection. Changes in the condition of the property can occur with passage of time, whether they are due to natural processes or the works of man on this or adjacent properties. In addition, changes in the state-of-art technology and/or government codes may occur. Due to such changes, the findings of this report may be invalidated wholly or in part by conditions beyond our control. Due to changes that can occur over time, submittals of this report to Regulatory Agencies may require additional site visits and assessment to document current conditions.

The final assessment of the potential for the existence of hazardous contaminants at the site should be considered a professional opinion based on the data obtained during the investigation and should not be considered a definitive statement that a hazardous contaminant or conditions are, or is not, present in the area of study. These opinions have been derived in accordance with current standards of practice.

This report is intended solely for use by the parties to whom it is addressed. This report is not intended for and may not contain sufficient information for purposes other than qualitative evaluation of asbestos or conditions at the time of our evaluation. Reliance on this report for other purposes or by other parties shall be at the user's sole risk.

WARRANTY

MTGL, Inc. warrants that the findings contained herein have been prepared with the level of care and skill exercised by experienced and knowledgeable environmental consultants who are appropriately licensed or otherwise trained to perform asbestos inspections and assessments pursuant to the scope of work required on this project. MTGL's Asbestos Survey Reports are prepared by trained certified professionals without a conflict of interest in the demolition(s) or renovation project(s) as per the Business and Professions Code 7180 (BP7180).

MTGL, Inc. warrants that the findings contained herein have been prepared in general accordance with accepted professional practices as applied by similar professionals in the community at the time of its preparation. Changes in the state of the art or in applicable regulations cannot be anticipated and have not been addressed in this report.

The survey included inspection of visible and accessible materials. MTGL did not inspect or sample inaccessible areas and did not dismantle any part of the structure to survey inaccessible areas. For the purpose of this warranty, inaccessible is defined as areas that could not be tested (sampled) without destruction of the structure or a portion of the structure. Inaccessible materials that are visible to MTGL's inspectors shall be assumed to be asbestos containing. No other warranty is expressed, or implied.

SECTION 3 ASBESTOS SURVEY METHODOLOGY

GENERAL REFERENCES

The asbestos survey consisted of two major activities: visual inspection and sampling. Although these activities are listed separately, they are integrated tasks.

VISUAL INSPECTION

The visual inspection was performed by an AHERA Certified Building Inspector under the direction of a California Certified Asbestos Consultant. An initial building walkthrough was conducted to determine the presence of suspect materials that were accessible or exposed. Materials that were similar in general appearance were grouped into homogeneous sampling areas.

HOMOGENEOUS MATERIAL CLASSIFICATIONS

A preliminary walkthrough of the building was conducted to determine areas of materials that were visually similar in color, texture, and general appearance and that appeared to have been installed at the same time. Such materials are termed "homogeneous materials" by the EPA. During this walkthrough, the approximate locations of these homogeneous materials were noted. Only materials that were accessible or exposed and suspected to contain asbestos were identified.

Following the EPA protocols, each identified suspect homogeneous material is placed in one of the following EPA classifications:

- Surfacing Materials (spray or trowel applied materials)
- Thermal System Insulation (materials applied to various mechanical systems)
- Miscellaneous Materials (any material which do not fit either of the above categories, such as floor tiles, etc.)

SAMPLING PROCEDURES

Following the walkthrough, the inspector collected selected samples of exposed or accessible materials identified as suspect material. Sampling was limited to accessible materials not involving destruction of walls, other building elements, physical barriers, or the structural integrity of the item being tested.

EPA guidelines were used to determine the sampling protocol. Sampling locations that were chosen to be representative of the homogeneous sampling area. While an effort was made to collect samples randomly, samples were taken preferentially from damaged areas or areas which were the least visible to minimize disturbance of the material.

Samples of surfacing material were collected in general accordance with the EPA random sampling protocol outlined in the EPA publication, "Asbestos in Buildings: Simplified Sampling Scheme for Friable Surfacing Materials" (EPA 560/5-85-030a, October 1985).

Samples of miscellaneous materials were also taken as randomly as possible, while attempting to sample already damaged areas so as to minimize disturbance of the material.

A minimum of three samples were collected of each homogeneous material. Depending on the quantity of homogeneous material, additional samples may be collected to avoid the possibility of false negative results.

LABORATORY PROCEDURES

Method of Analysis

Analysis was performed by visually observing the bulk sample and preparing slides for microscopic examination and identification. The samples were mounted on slides and then analyzed for asbestos (chrysotile, amosite, crocidolite, anthophyllite, and actinolite/tremolite), fibrous non-asbestos constituents (mineral wool, paper, etc.) and nonfibrous constituents. Asbestos was identified by refractive indices, morphology, color, pleochroism, birefringence, extinction characteristics, and signs of elongation. The same characteristics were used to identify the non-asbestos constituents.

The microscopist used a stereoscope to visually estimate relative amounts of each constituent using a stereoscope to determine the volume of each constituent in proportion to the total volume of the sample.

All bulk samples were analyzed by Polarized Light Microscopy (PLM) with dispersion staining as described by the Interim Method of the Determination of Asbestos in Bulk Insulation, Federal Register, 40 CFR Ch. 1 Pt. 763, App. A to Subpart. F, July 1, 1987. This is a standard method of analysis in optical mineralogy and the currently accepted method for the determination of asbestos in bulk samples. A suspect material is immersed in a solution of known refractive index and subjected to illumination by polarized light. The characteristic color displays that result enable mineral identification. It should be noted that some ACM may not be accurately identified or quantified by PLM. As an example, the original fabrication of vinyl floor tiles routinely involved milling of asbestos fibers to extremely small sizes. As a result, these fibers may go undetected under the standard polarized light microscopy method. Transmission Electron Microscopy (TEM) is recommended for a more definitive analysis of these materials. MTGL, Inc. has no control over how the laboratory describes materials or layers of materials being analyzed. Although a minimum of three samples are collected of suspect building materials, first positive stops may be requested of the laboratory and the results of the one positive sample will be reported. All other homogeneous materials will be assumed to be positive for asbestos content.

Laboratory Quality Control Program

MTGL, Inc. only uses laboratories that maintain an in-house quality control program. This program involves blind reanalysis of ten percent of all samples, precision and accuracy controls, and use of standard bulk reference materials.

SECTION 4 ASBESTOS OBSERVATIONS AND FINDINGS

SUMMARY

Table 1: Positively Identified Materials that Contain Asbestos (ACM and ACCM) and Assessment of Material Condition (as of the date the survey was conducted). Laboratory Results can be found in Appendix 1.

Material* Description	Location*	Sample #	Approximate Quantity**	AHERA Rank***	Friability/ Material Type	Damage Category	Quantity of Contamination (If any) **	Asbestos Content
Pipe Elbow Insulation	Throughout	31	Undetermined as elbows may run behind walls or inside soffits.	7	Friable	1	None	Tan Powder Material w/Mesh and Tape 15%

Note: Samples 32 and 33 not analyzed as part of progressive set.

*Positively identified ACM and ACCM that are similar in color and texture in other locations throughout the structure and facility shall be considered as asbestos containing until further sampling/analysis determines otherwise. In the event suspect asbestos containing materials are discovered during maintenance, renovation and/or demolition that are not identified in this report, disturbance of the materials should be stopped until further assessment of the material for asbestos content can be conducted.

**MTGL, Inc. is not responsible for actual quantity of the material(s). MTGL recommends bidding contractors measure and calculate quantities for estimated abatement costs and notifications. (sf= square foot; NA= not applicable)

- ***Each homogeneous area of friable and non-friable asbestos-containing material (ACM) was classified into one of the following seven categories, as specified in EPA's AHERA regulations (40 CFR 763.88):
- (1) Damaged or significantly damaged thermal system insulation ACM.
- (2) Damaged friable surfacing ACM.
- (3) Significantly damaged friable surfacing ACM.
- (4) Damaged or significantly damaged friable miscellaneous ACM.
- (5) ACBM with potential for damage.
- (6) ACBM with potential for significant damage.
- (7) Any remaining friable ACBM or friable suspected ACBM.
- (X) Not applicable (material is non-friable surfacing or miscellaneous material).

The damage categories are defined as follows:

Category 1 - "Undamaged" means the material had no visible damage, or extremely minor damage or surface marring (i.e., a room full of floor tile with only two or three small corners chipped off on the tile).

Category 2 - "Damaged" means the material had visible damage evenly distributed over less than 10% of its surface, or localized over less than 25% of its surface.

Category 3 - "Significantly Damaged" means the material had visible damage that is evenly distributed over 10% or more of its surface, or localized over 25% or more if its surface.

Table 2: Materials found to be Negative for Asbestos (as of the date the survey was conducted). Laboratory results can be found in Appendix 1.

Material* Description	Sample #
12"x12" Acoustic Ceiling Tile (Wall)	1, 2, 3
Epoxy Flooring	4, 5, 6
Concrete Block Wall	7, 8, 9
Concrete Floor	10, 11, 12
2'x4' Fissured Ceiling Tile	13, 14, 15
Carpet Glue	16, 17, 18
Ceiling Plaster	19, 20, 21
Concrete Wall	22, 23, 24
Ceramic Wall tile	25, 26, 27
Ceramic Floor Tile	28, 29, 30
Fiberglass Pipe Wrap	34, 35, 36
Concrete Texture Coat (Ext. Soffit)	37, 38, 39
Asphalt	40, 41, 42
Exterior Concrete Block	43, 44, 45
Stone Wall	46, 47, 48
Concrete Sidewalk	49, 50 51
Silver Coated Rolled Roofing	53, 54, 55
Silver Coated Roof Mastic	56, 57, 58
HVAC Seam Caulk	59, 60, 61

GENERAL INFORMATION

Environmental Protection Agency (EPA)

According to the South Coast Air Quality Management District's Rule 1402paragraph (H)(2)(C), the analysis of composite samples of multi-layered material including, but not limited to, stucco (base and scratch coat) and wall systems is prohibited for the quantification of asbestos content. All separable layers shall be analyzed and reported separately for asbestos content.

These materials are eligible for analyzed using 1,000 Point Count with Gravimetric Reduction methods. Analysis would be conducted per strata and materials found to be greater than 0.1% asbestos are regulated by OSHA and handled as asbestos containing until packaged and stored for disposal. Materials greater than 1% are regulated by EPA/APCD and would require disposal as asbestos containing material.

A material is considered by the EPA and the State of California to be asbestos-containing if at least one sample collected from the area shows asbestos present in an amount greater than one percent (>1%).

California Occupational Safety & Health Agency (Cal/OSHA)

Title 8, California Code of Regulation 1529 defines asbestos-containing construction materials as materials containing greater than one-tenth of one percent (0.1%) asbestos by weight. Under this code, materials containing between 0.1% and 1% asbestos are regulated as other regulated operations. Although operations involving materials containing between 0.1% and 1% asbestos are not considered Class I, II, or III work, several sections of the standard are applicable, including negative exposure assessments and the use of regulated areas.

Laboratory analysis may report materials as "Trace Asbestos". These materials are assumed to be greater than 0.1%. Upon client request, these materials can be analyzed using 1,000 Point Count with Gravimetric Reduction methods. Materials found to be greater than 0.1% asbestos are regulated by OSHA and handled as asbestos containing until packaged and stored for disposal.

Please refer to the laboratory analysis for a more detailed description of the microscopic analysis of these samples.

Asbestos-containing materials (ACM) are regulated by federal, state, and local agencies, which include but may not be limited to the following:

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) requires an inspection for asbestos be done on facilities that are to undergo demolition or renovation work. Materials found to contain asbestos may need to be removed prior to the start of such demolition/renovation work.

NESHAP defines Category I non-friable asbestos-containing materials as gaskets, resilient floor covering, and asphalt roofing products that contain more than one percent asbestos, and Category II non-friable as any materials, except for Category I non-friable, that contain more than one percent asbestos and cannot be reduced to a powder by hand pressure when dry. NESHAP defines a Regulated Asbestos-Containing Material (RACM) as: (a) friable ACM, (b) Category I non-friable that has become friable, (c) Category I non-friable that has or may be subject to sanding, grinding, cutting, or abrading, and (d) Category II non-friable that may or has become friable during demolition or renovation.

SECTION 5 CONCLUSIONS & RECOMMENDATIONS

CONCLUSIONS

On this asbestos survey, materials observed and tested for asbestos were positive for asbestos content.

The pipe elbow insulation was reported to contain >1% asbestos.

RECOMMENDATIONS

If during renovation or demolition activities, materials other than the ones discussed in this report are observed, the materials should be tested for asbestos content prior to disturbance.

General

MTGL recommends that all asbestos containing materials be removed prior to any renovation and/or demolition activities, which may impact the materials. A Licensed Abatement Contractor in the State of California should perform the removal activities.

Removal of ACM/ACCM should be conducted in accordance with EPA and OSHA requirements for Federal, State and Local rules and regulations. All asbestos removal should be conducted using wet methods and engineering controls to reduce airborne fiber concentrations. OSHA required personal protective equipment must be used for worker protection.

All activities that may disturb or disrupt asbestos containing material must be conducted in properly demarcated regulated areas using wet removal methods.

Proper decontamination methods must be used by all workers entering and leaving regulated work areas where asbestos containing materials are being removed.

In the event ACM or ACCM materials are observed to be damaged and/or visible contamination is present, isolate the immediate area, turn off HVAC systems. Only properly trained and certified workers may enter the work area to conducted clean-up activities using wet methods.

If renovation and/or demolition activities do not impact the asbestos containing materials, then the materials can be managed in place. Periodic surveillance is recommended. An Operations & Maintenance (O&M) program should be established and conducted by properly trained personnel. Minimum training for each type of material that has been identified should be given as required by Cal/OSHA. Additionally, postings would be required in all publicly accessible areas warning of the potential hazard to satisfy the Proposition 65 & Hazard Communication regulations.

SECTION 6 APPENDICES

APPENDIX 1 ASBESTOS LABORATORY RESULTS & CHAIN OF CUSTODY



Report for:

Mr. Carl Tucker MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126

Eurofins EPK Built Environment Testing, LLC Project: Vanir Const. - OC Juvenile Hall; 331 The City of Orange B3 Regarding:

EMĹ ID: 3592263

Approved by:

Dates of Analysis: Asbestos PLM: 04-03-2024

Technical Manager Ryan Talaski-Brown

Ryan M. Telas A. Bran

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267) NVLAP Lab Code 200741-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

EMLab ID: 3592263, Page 1 of 14

4321 S. Corbett Ave. Suite A, Portland, OR 97239 (800) 651-4802 www.eurofinsus.com/Built

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B3

Date of Sampling: 03-29-2024 Date of Receipt: 03-30-2024 Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Total Samples Submitted: 51

Total Samples Analyzed: 49

Lab ID-Version 1: 17567576-1

Lab ID-Version 1: 17567577-1

Lab ID-Version : 17567578-1

EMLab ID: 3592263, Page 2 of 14

Total Samples with Layer Asbestos Content > 1%:

Location: 1. 12"x12" Ceiling Tile/Mastic

Location, 1, 12 M12 Coming The/1/14sere	•
Sample Layers	Asbestos Content
Brown Mastic	ND
Orange Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	70% Cellulose
_	< 1% Talc
Sample Composite Homogeneity:	Moderate

Location: 2, 12"x12" Ceiling Tile/Mastic

Sample Layers	Asbestos Content
Brown Mastic	ND
Orange Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	
	<pre> < 1% Talc</pre>
Sample Composite Homogeneity:	Moderate

Location: 3, 12"x12" Ceiling Tile/Mastic

Sample Layers	Asbestos Content	
Brown Mastic	ND	
Orange Ceiling Tile with White Surface	ND	
Composite Non-Asbestos Content: 70% Cellulose		
< 1% Talc		
Sample Composite Homogeneity: Moderate		

Location: 4. Epoxy Flooring

Location: 4, Epoxy Flooring	Lab ID-Version‡: 17567579-1	
Sample Layers	Asbestos Content	
Semi-Transparent Flooring	ND	
Sample Composite Homogeneity:	Moderate	

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

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EMLab ID: 3592263, Page 3 of 14

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B3

Date of Sampling: 03-29-2024 Date of Receipt: 03-30-2024 Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Lab ID-Version‡: 17567580-1

Sample Layers	Asbestos Content
Semi-Transparent Flooring	ND
Sample Composite Homogeneity:	Moderate

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Lab ID-Version 1: 17567582-1

Lab ID-Version 1: 17567583-1

Lab ID-Version 1: 17567584-1

EMLab ID: 3592263, Page 4 of 14

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B3

Date of Sampling: 03-29-2024 Date of Receipt: 03-30-2024 Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Lab ID-Version:: 17567581-1

Sample Layers	Asbestos Content	
Semi-Transparent Flooring	ND	
Sample Composite Homogeneity: Moderate		

Location: 7, Concrete Block Wall

Sample Layers	Asbestos Content	
Gray Concrete with Paint	ND	
Sample Composite Homogeneity: Poor		

Location: 8, Concrete Block Wall

Sample Layers	Asbestos Content	
Gray Concrete with Paint	ND	
Sample Composite Homogeneity: Poor		

Location: 9. Concrete Block Wall

Sample Layers	Asbestos Content
Gray Concrete with Paint	ND
Sample Composite Homogeneity:	Poor

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

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EMLab ID: 3592263, Page 5 of 14

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B3

Date of Sampling: 03-29-2024 Date of Receipt: 03-30-2024 Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Location: 10, Concrete Floor Lab ID-Version‡: 17567585-1

Sample Layers	Asbestos Content	
Tan Concrete	ND	
Sample Composite Homogeneity: Poor		

Location: 11, Concrete Floor	Lab ID-Version‡: 17567586-1
Sample Layers	Asbestos Content
Tan Concrete	ND
Sample Composite Homogeneity:	Poor

Location: 12, Concrete Floor Lab ID-Version 17567587-1

Sample Layers	Asbestos Content
Tan Concrete	ND
Sample Composite Homogeneity: Poor	

Location: 13, 2"x4" Fissured Ceiling Tile	Lab ID-Version‡: 17567588-1
Sample Layers	Asbestos Content
Light Gray Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	60% Cellulose
-	10% Glass Fibers
Sample Composite Homogeneity:	Moderate

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Lab ID-Version‡: 17567589-1

EMLab ID: 3592263, Page 6 of 14

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B3

Date of Sampling: 03-29-2024 Date of Receipt: 03-30-2024 Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Location: 14, 2"x4" Fissured Ceiling Tile

Sample Layers	Asbestos Content
Light Gray Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	60% Cellulose
_	10% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 15, 2"x4" Fissured Ceiling Tile

Location: 15, 2"x4" Fissured Ceiling Tile	Lab ID-Version‡: 17567590-1
Sample Layers	Asbestos Content
Light Gray Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	60% Cellulose
	10% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 16, Carpet Glue	Lab ID-Version‡: 17567591-1
Sample Layers	Asbestos Content
Tan Glue	ND
Composite Non-Asbestos Content:	5% Synthetic Fibers
Sample Composite Homogeneity:	Poor

Location: 17, Carpet Glue	Lab ID-Version‡: 17567592-1
Sample Layers	Asbestos Content
Tan Glue	ND
Composite Non-Asbestos Content:	5% Synthetic Fibers
Sample Composite Homogeneity:	Poor

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Lab ID-Version*: 17567593-1

Lab ID-Version 1: 17567594-1

Lab ID-Version : 17567595-1

EMLab ID: 3592263, Page 7 of 14

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B3

Date of Sampling: 03-29-2024 Date of Receipt: 03-30-2024 Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Location: 18 Carnet Glue

Location: 10, Carpet Gluc	Lab ID Version 4. 17507575 1
Sample Layers	Asbestos Content
Tan Glue	ND
Composite Non-Asbestos Content:	5% Synthetic Fibers
Sample Composite Homogeneity:	Poor

Location: 19. Ceiling Plaster

Location, 13, coming 1 master	***
Sample Layers	Asbestos Content
Beige Plaster	ND
White Skim Coat with Paint	ND
Sample Composite Homogeneity: Poor	

Location: 20. Ceiling Plaster

Sample Layers	Asbestos Content
Beige Plaster	ND
White Skim Coat with Paint	ND
Sample Composite Homogeneity: Poor	

Location: 21, Ceiling Plaster	Lab ID-Version‡: 17567596-1
Sample Layers	Asbestos Content
Beige Plaster	ND
White Skim Coat with Paint	ND
Sample Composite Homogeneity:	Poor

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Lab ID-Version 1: 17567598-1

Lab ID-Version 1: 17567599-1

Lab ID-Version 1: 17567600-1

EMLab ID: 3592263, Page 8 of 14

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B3

Date of Sampling: 03-29-2024 Date of Receipt: 03-30-2024 Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Location: 22, Concrete Wall

Lab ID-Version: 17567597-1

Sample Layers	Asbestos Content
Gray Concrete with Paint	ND
Sample Composite Homogeneity: Poor	

Location: 23. Concrete Wall

Sample Layers	Asbestos Content
Gray Concrete with Paint	ND
Sample Composite Homogeneity: Poor	

Location: 24, Concrete Wall

Sample Layers	Asbestos Content
Gray Concrete with Paint	ND
Sample Composite Homogeneity: Poor	

Location: 25. Ceramic Wall Tile

Location, 20, columns (van The	•
Sample Layers	Asbestos Content
Gray Mortar	ND
Yellow Ceramic Tile	ND
Sample Composite Homogeneity: Poor	

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Lab ID-Version : 17567601-1

Lab ID-Version‡: 17567603-1

Lab ID-Version 1: 17567604-1

EMLab ID: 3592263, Page 9 of 14

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B3

Date of Sampling: 03-29-2024 Date of Receipt: 03-30-2024 Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Location: 26, Ceramic Wall Tile

Sample Layers	Asbestos Content
Gray Mortar	ND
Yellow Ceramic Tile	ND
Sample Composite Homogeneity: Poor	

Location: 27. Ceramic Wall Tile

Location: 27, Ceramic Wall Tile	Lab ID-Version‡: 17567602-1
Sample Layers	Asbestos Content
Gray Mortar	ND
Yellow Ceramic Tile	ND
Sample Composite Homogeneity:	Poor

Location: 28, Ceramic Floor Tile

Sample Layers	Asbestos Content
Gray Mortar	ND
White Ceramic Tile	ND
Sample Composite Homogeneity: Poor	

Location: 29, Ceramic Floor Tile

Sample Layers	Asbestos Content
Gray Mortar	ND
White Ceramic Tile	ND
Sample Composite Homogeneity: Poor	

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

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Lab ID-Version‡: 17567605-1

Lab ID-Version 1: 17567606-1

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B3

Date of Sampling: 03-29-2024 Date of Receipt: 03-30-2024 Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Location: 30, Ceramic Floor Tile

Sample Layers	Asbestos Content
Gray Mortar	ND
White Ceramic Tile	ND
Sample Composite Homogeneity: Poor	

Location: 31. Pine Elbow Insulation

Location: 51,11pc Libot: Insulation	
Sample Layers	Asbestos Content
Tan Powdery Material with tan mesh and paint	15% Chrysotile
Sample Composite Homogeneity:	Poor

Comments: Samples 32 and 33 not analyzed as part of progressive set.

Location: 34, Fiberglass Pipe Wrap	Lab ID-Version‡: 17567609-1
Sample Layers	Asbestos Content
Yellow Insulation with off-white mesh	ND
Composite Non-Asbestos Content:	50% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 35, Fiberglass Pipe Wrap	Lab ID-Version‡: 17567610-1
Sample Layers	Asbestos Content
Yellow Insulation with off-white mesh	ND
Composite Non-Asbestos Content:	50% Glass Fibers
Sample Composite Homogeneity:	Moderate

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

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Lab ID-Version : 17567611-1

Lab ID-Version 1: 17567612-1

Lab ID-Version 1: 17567613-1

Client: MTGL, Inc. C/O: Mr. Carl Tucker Date of Sampling: 03-29-2024

Re: Vanir Const. - OC Juvenile Hall; 331 The City of Date of Receipt: 03-30-2024 Orange B3 Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Location: 36, Fiberglass Pipe Wrap

Sample Layers	Asbestos Content
Yellow Insulation with off-white mesh	ND
Composite Non-Asbestos Content:	50% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 37. Concrete Texture Coat

	•
Sample Layers	Asbestos Content
Gray Powdery Material with gray paint	ND
Sample Composite Homogeneity:	Good

Location: 38. Concrete Texture Coat

Sample Layers	Asbestos Content
Gray Powdery Material with gray paint	ND
Sample Composite Homogeneity:	Good

Location: 39. Concrete Texture Coat

Location: 39, Concrete Texture Coat	Lab ID-Version‡: 17567614-1
Sample Layers	Asbestos Content
Gray Powdery Material with gray paint	ND
Sample Composite Homogeneity:	Good

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

4321 S. Corbett Ave. Suite A, Portland, OR 97239 (800) 651-4802 www.eurofinsus.com/Built

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B3

Date of Sampling: 03-29-2024 Date of Receipt: 03-30-2024 Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Lab ID-Version‡: 17567615-1

Sample Layers	Asbestos Content
Black Asphalt	ND
Sample Composite Homogeneity:	Good

Lab ID-Version;: 17567616-1

Sample Layers	Asbestos Content
Black Asphalt	ND
Sample Composite Homogeneity:	Good

Lab ID-Version‡: 17567617-1

Sample Layers	Asbestos Content
Black Asphalt	ND
Sample Composite Homogeneity:	Good

Location: 43, Exterior Concrete Block

Sample Layers	Asbestos Content
Gray Concrete with gray paint	ND
Sample Composite Homogeneity:	Good

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 \ddagger A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Lab ID-Version 1: 17567618-1

4321 S. Corbett Ave. Suite A, Portland, OR 97239 (800) 651-4802 www.eurofinsus.com/Built

Lab ID-Version‡: 17567619-1

Lab ID-Version : 17567620-1

Lab ID-Version : 17567621-1

Lab ID-Version‡: 17567622-1

Client: MTGL, Inc. (800) 651-4802 www. C/O: Mr. Carl Tucker Date of Sampling: 03-29-2024

Re: Vanir Const. - OC Juvenile Hall; 331 The City of Orange B3

Date of Sampling: 03 29 2024
Date of Receipt: 03-30-2024
Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Location: 44, Exterior Concrete Block

Sample Layers	Asbestos Content
Gray Concrete with gray paint	ND
Sample Composite Homogeneity:	Good

Location: 45, Exterior Concrete Block

Sample Layers	Asbestos Content
Gray Concrete with gray paint	ND
Sample Composite Homogeneity:	Good

Location: 46, Stone Wall

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 47, Stone Wall

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

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4321 S. Corbett Ave. Suite A, Portland, OR 97239 (800) 651-4802 www.eurofinsus.com/Built

Lab ID-Version : 17567624-1

Lab ID-Version 1: 17567625-1

Lab ID-Version †: 17567626-1

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B3

Date of Sampling: 03-29-2024 Date of Receipt: 03-30-2024 Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Lab ID-Version;: 17567623-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 49. Concrete Sidewalk

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 50, Concrete Sidewalk

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 51, Concrete Sidewalk

Location: 51, Concrete Stucwark	240 12 (0101014: 1700/020 1
Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

CHAIN OF CUSTODY 🔆 eurofins

www.eurofinsus.com/Built

Buill Environment Testing

Fog Rain Snow Wind Clear WEATHER None LEVEL Light Moderate Heavy

REQUE BioCassette

Non-Culturable

Tape,

Swab, Wab

East: (866) 871-1984 Central: (800) 651-4802

est: (866) 8	CONTACT INFO						Borderia				17400)		
mpany:	MTGL, Inc. Address.	1742 Arjons DR., San Diago, CA tructions: the Stop 7190				-	90	200			Count (NIOSH	9 1	11
ntact	CARLTUCKU X15	positue Stop 7190				dds o	(dds	2	æ		count (
one:	619-454-7851	TURN AROUND TIME CODES - (TAT)	1 1	(lave)	Carm	4 AS	100	Compression	(Presence/Absence			1 3	
	PROJECT INFORMATION	STD - Standard (Default) Rushes received after 2pm		Qualitative)	girect to	C) Xin	9	Junio	euce/	- To	Airborne Fibor		()
ject ID:	Vanir Const Oc Twenile Ha	ND - Next Business Day or on weekends, will be considered received the	H 13	EXBITT (Q)	unt dir	Si Ga	- 0	3	Pess	QuantiTray Sewage Soreen OTHER: (please specify test	100	4	The second secon
ject scription:	331 The City of Grange Do	nevt business day Please	nalysis	partic pic Ex	ore co	zation) jūun	Tree or	E coll	e spe		PLM	
Code	Sampled	WH - Weekend/Holiday/ASAP weekend analysis needs.	p Ana	Microsco	ve spo	sracteriz Curtace	AI F	in and	Total Caliform, E coll	py Ser	Asbestos in Air	Bulk)- Fig	gens (please sper gens (please
Number:	5DRE-24-061.1CT By Sar	de Total Nortes	Te Trap	et Mic	antitate	5 4	de la	m Sta	loo le	HER	Softsec	bestos Bu	R (ple
SAMPL	DESCRIPTION TO	(Above) Volume/Area (Time of day, Temp, RH, etc.)	Spo	Direct	QUS	Dust	S. A.	85 S	10	9 6	ASS	\$ 3	2 ×
-	12"412" Ceiling Tile Maste	55D ~1"2						1				X	
7780070	Epoky Flooring Concrete Block Wall Concrete Floor 2 2"x4" Fissured Ceiling The											\ \ *	
	15	RELINQUISHED BY DATE & TIM	E			REC	EIVE	р ву					& TIME
					-			_	_	7	31		
BC - BioC	assette CP - Contact Plate T - Tape O - O	11/1/1/1/1/2/201	1016			1	-	Carl	her		1	1,33	420
	SAMPLE TYPE CODES		7	_	-	REC	_	-	-	7		356	24

CHAIN OF CUSTODY is eurofins

www.eurofinsus.com/Built

East: (866) 871-1984

Built Environment Testing

WEATHER Fog Rain Snow Wind Clear None LEVEL Light Moderate

Non-Culturable

West: (866) 888-		ACT INFORMATION			П	\dagger	T	П	П	(a)	П	T	П	1	П		
Contact C	MTGI, Inc. ARLTUCKU 19-454-7851		: Arjons DR.	San Diagoica 192126					Asp. spp.)	spp.) r and Surface Bacteria)		noe)		Count (NIDSH 7400)	ACCUSATE PRODUCTION OF THE PROPERTY OF THE PRO		
	PROJECT INFORMATION		TURN AROUND T	ME CODES - (TAT)		emen	exam		+ 0	Asp ole A		Abse		ag.			
escription: roject p Code:	Janir Coust OcTuveri 331 The City of Orang 92868 Sampling 5 3 DBE-24-061.107 By:	129/24 SD S	Standard (Default) ext Business Day ame Business Day Veekend/Holiday/ASAP	Rushes received after 2pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.	ap Analysis	logical particles - supple	scopic exam (qua spore count direct	terization	£ .	size wir rungi (Denus ib 7 Asp. spp. Stain and Counts (Culturable Air and	JT.6	Total Coliform, E coil (Presence/Absence QuantiTray-Sewade Screen	(please specify test)	In Air - PCM Airborne F	Bulk -) - Flame AA	Allergens (please specify test)
SAMPLE ID	DESCRIPTION	Sample Type (Below)	Total Volume/Area (as applicable)	NOTES (Time of day, Temp, RH, etc.)	Spore Tr	Other bio	Quantitative	Dust Char	1.Media	Gram Stair	Legionel	Total Col	OTHER.	Asbestos	Asbestos	Lead (Pb) -	Allergens
1218901234547890	Carpet Ghile Ceiling Plaster Concrete Wall Ceramic Wall 176 Ceramic Flood 176	2															
30	+	NX	1										Ц		×		
	SAMPLE TYPE CODES		RELINQUISHEE	DATE & TIME	L			REC	CEIVI	ED B	Y	7	_	D	DATE	8 T	IME
BC - BioCassette AS - Andersen GAS - Surface Ai IP - Non-potable	ST - Spore Trap SW - Swab ir Sampler B - Bulk SO - Soil	O - Other:	Sichelle a	Metra 3/29/24		(-	0	a	ru	ony		3/7	10	14	20

CHAIN OF CUSTODY 3 eurofins WEATHER Fog Rain Snow Wind Clear Built Environment Testing www.eurofinsus.com/Built None Light Non-Culturable 003592263 East: (866) 871-1984 Moderate BioCa Central: (800) 651-4802 Spore Tape. Heavy Trap Swab, Bulk West: (866) 888-6653 CONTACT INFORMATION Address: 7742 Arjons DR., San Diago, (4) Special Instructions: MTGLI Inc. Company CARLTUCKU Contact 619-454-7851 Phone PROJECT INFORMATION TURN AROUND TIME CODES - (TAT) STD - Standard (Default) Rushes received after 2pm test) Project ID or on weekends, will be Project 331 The City of Gronge ND - Next Business Day Description: considered received the Project next business day. Please 92868 SD - Same Business Day Zip Code. alert us in advance of WH - Weekend/Holiday/ASAP weekend analysis needs. 5DRE-24-061.10 By PO Number Sample Total TAT NOTES SAMPLE ID DESCRIPTION Type Volume/Area (Above) (Time of day, Temp, RH, etc.) (as applicable) (Below) STO Concrete Tresture Cont + Sphaft Ext. Soffit RÉLINQUISHED BY DATE & TIME SAMPLE TYPE CODES RECEIVED BY DATE & TIME O - Other BC - BioCassette CP - Contact Plate T - Tape 3130/24 A1S - Andersen ST - Spore Trap SW - Swab 10:426

SAS - Surface Air Sampler

NP - Non-potable Water

B - Bulk

P - Potable Water

SO - Soil

D - Dust

CHAIN OF CUSTODY 💸 eurofins

www.eurofinsus.com/Built

East: (866) 871-1984

Built Environment Test	

V	VEATHER	Fog	Rain	Snow	Wind	Clear
	None	1				
교	Light					
íú.	Moderate					
_	Heavy					

114			
	MA		Ш
1000000	1000	0.00	100

003592263

Non-Culturable

est: (866) 888-6653 ompany: MTGL; ontact: CARLTUC		TACT INFORMA	TION						(8)				_	1		
PROJE	RECTINFORMATION UST OCTIVEN Sampling Date/Time: Sampled	cle Hall	TURN AROUND TO STD - Standard (Default) ND - Next Business Day SD - Same Business Day WH - Weekend/Holiday/ASAF	ME CODES - (TAT) Rushes received after 2pm or on weekends, will be considered received the next business day. Please alert us in advance of	Trap Analysis	Other biological particles - supplement Direct Microscopic Exam (Qualitative)	Quantitative spore count direct exam		Culturable Air Fungi (Genus ID + Asp. strp.) Gram Stain and Counts (Culturable Air and Surface Bacteria)		Total Colliform, E doit (Presence/Adsence) QuantiTray-Sewage Screen	OTHER (please specify test)	Asbestos in Air - PCM Airborne Fiber Count (NIOSH 7400)	Asbestos Bulk - PLM	15 e	Allergens (piesse specifiy test)
46 Sto 49 Con 50 51	ne wall crete Sideur	CL (Below)	STD 112	Exterior										\ \ \ \ \		
BC - BioCassette C	MPLE TYPE CODES OP - Contact Plate T - Tape ST - Spore Trap SW - Sw	5001	RELINQUISHE Michello Ether Uylchille Eth	DBY DATE & TIME				RECE	Sca	BY	-	2		-	8 TI	_



Report for:

Mr. Carl Tucker MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126

Eurofins EPK Built Environment Testing, LLC Project: Vanir Const. - OC Juvenile Hall; 331 The City of Orange B3 Regarding:

EMĹ ID: 3600730

Approved by:

Dates of Analysis: Asbestos PLM: 04-11-2024

Approved Signatory Carlos Rivadeneyra

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267) NVLAP Lab Code 500034-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B3

Date of Sampling: 04-02-2024 Date of Receipt: 04-08-2024 Date of Report: 04-11-2024

ASBESTOS PLM REPORT

Total Samples Submitted: 9 **Total Samples Analyzed:** 9

Lab ID-Version 1: 17611025-1

Lab ID-Version*: 17611026-1

Lab ID-Version‡: 17611027-1

EMLab ID: 3600730, Page 2 of 4

Total Samples with Layer Asbestos Content > 1%: 0

Location: 53, Rolled Roofing

Location: 55, Konca Kooling	Eur ID Version 1. 17011025 1
Sample Layers	Asbestos Content
Silver Coating (Trace)	ND
Black Roofing Shingle	ND
Black Roofing Tar and Felt	ND
Brown Insulation	ND
Composite Non-Asbestos Content:	
	8% Glass Fibers
Sample Composite Homogeneity:	Poor

Location: 54 Rolled Roofing

Location: 34, Koneu Kooling	Lau ID- version ₊ . 17011020-1
Sample Layers	Asbestos Content
Silver Coating (Trace)	ND
Black Roofing Shingle	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt 2	ND
Brown Insulation	ND
Composite Non-Asbestos Content:	20% Cellulose
•	14% Glass Fibers
Sample Composite Homogeneity:	Poor

Location: 55, Rolled Roofing

Sample Layers	Asbestos Content
Silver Coating (Trace)	ND
Black Roofing Shingle	ND
Black Roofing Tar and Felt 2	ND
Brown Insulation	ND
Composite Non-Asbestos Content:	15% Cellulose 14% Glass Fibers
Sample Composite Homogeneity:	Poor

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9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

EMLab ID: 3600730, Page 3 of 4

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B3

Date of Sampling: 04-02-2024 Date of Receipt: 04-08-2024 Date of Report: 04-11-2024

ASBESTOS PLM REPORT

Location: 56, Roof Mastic Lab ID-Version‡: 17611028-1

Sample Layers	Asbestos Content			
Silver Coating (Trace)	ND			
Black Roofing Mastic	ND			
Sample Composite Homogeneity: Moderate				

Location: 57, Roof Mastic Lab ID-Version 1: 17611029-1

Sample Layers	Asbestos Content				
Brown Non-Fibrous Material	ND				
Silver Coating (Trace)	ND				
Black Roofing Mastic	ND				
Sample Composite Homogeneity: Poor					

Location: 58, Roof Mastic Lab ID-Version 1: 17611030-1

Sample Layers	Asbestos Content					
Silver Coating (Trace)	ND					
Black Roofing Mastic	ND					
Composite Non-Asbestos Content: 7% Glass Fibers						
Sample Composite Homogeneity: Moderate						

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9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

EMLab ID: 3600730, Page 4 of 4

C/O: Mr. Carl Tucker Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B3

Client: MTGL, Inc.

Date of Sampling: 04-02-2024 Date of Receipt: 04-08-2024 Date of Report: 04-11-2024

ASBESTOS PLM REPORT

Location: 59, HVAC Seam Lab ID-Version : 17611031-1

Sample Layers	Asbestos Content				
Gray Non-Fibrous Material (HVAC Seam)	ND				
Sample Composite Homogeneity:	Good				

Location: 60, HVAC Seam Lab ID-Version : 17611032-1

Sample Layers	Asbestos Content				
Gray Non-Fibrous Material (HVAC Seam)	ND				
Sample Composite Homogeneity:	Good				

Location: 61, HVAC Seam Lab ID-Version 1: 17611033-1

Sample Layers	Asbestos Content				
Gray Non-Fibrous Material (HVAC Seam)	ND				
Sample Composite Homogeneity:	Good				

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CHAIN OF CUSTOD www.eurofinsus.com/Built East: (866) 871-1984 Central: (800) 651-4802 West: (866) 888-6653	Y 💸 eurofins	nvironment Te		Snow Wind Clear		urable Tape, ab, Bulk	REQU BioCasse Swab, Wa	003600	730
Project ID: Vanir C Project 331 To Project 92868 PO Number: 5DR-24-6	LIC. CKU -7851 JECT INFORMATION ONST OCTUVENILE City of Oronge Sampling Date Time Sampled	Hall STE 133 ND 2/24 SD WH Sample Type (Below) (Al	TURN AROUND TIME CODES - O - Standard (Default) - Next Business Day - Same Business Day - Weekend/Holiday/ASAP Total NO Rushes reconsider or on wee consider next business bay weekend	ceived after 2pm rekends, will be ed received the ness day. Please in advance of analysis needs.	Spore Trap Analysis Other biological particles - supplement Direct Microscopic Parent (Challitative)	Ouantitative spore count direct exam Dust Characterization	1-Modia Surface Fungi (Genus ID + Asp. spp.) Culturable Air Fungi (Genus ID + Asp. spp.) Gram Stain and Counts (Culturable Air and Surface Bedetia	Legionella culture Total Coliform, E coli (Presence! Absence) Quantifray-Sewage Screen OTHER: (please specify test)	Asbestos in Air - PCM Airborne Fiber Count (NIOSH 7400) Asbestos Bulk - PLM Lead (Pb) Flame AA PCR (please specify test) Altergens (please specify test)
BC - BioCassette A1S - Andersen SAS - Surface Air Sampler	SAMPLE TYPE CODES CP - Contact Plate T - Tape ST - Spore Trap SW - Swab B - Bulk SO - Soil	O - Other	Michelle Mesm	4/5/24		4	RECEIVED	ву	A (8)

United States Department of Commerce National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 500034-0

Eurofins EMLab P&K

San Diego, CA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2024-01-01 through 2024-12-31

Effective Dates



For the National Voluntary Laboratory Accreditation Program



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Eurofins EMLab P&K

9445 Farnham St #103 San Diego, CA 92123 Quynh Nguyen Phone: 800-651-4802

Email: quynh.nguyen@et.eurofinsus.com https://www.eurofinsus.com/environment-testing/

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 500034-0

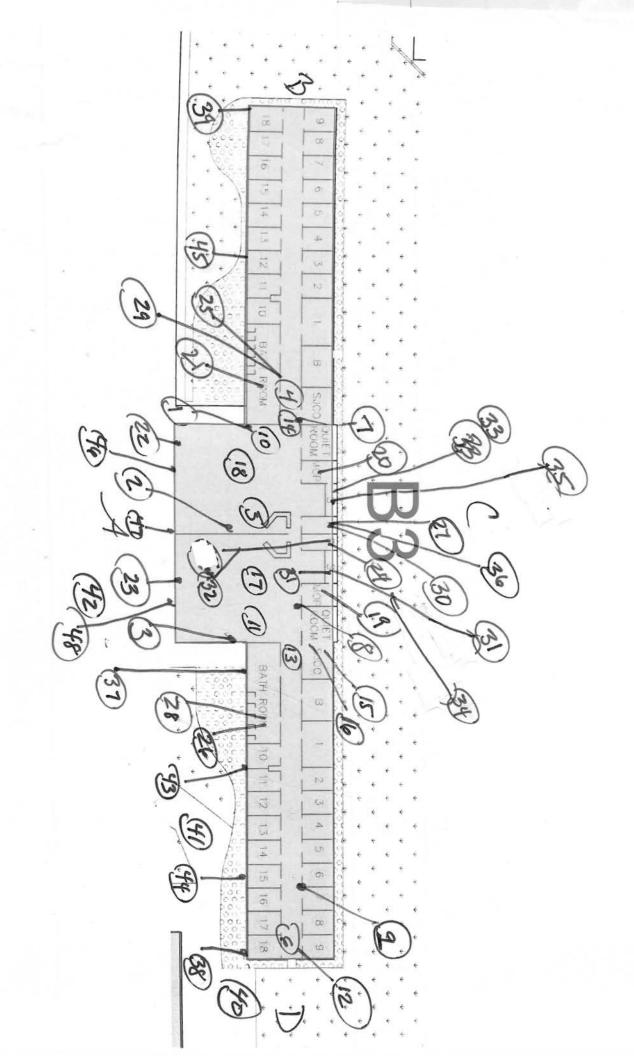
Bulk Asbestos Analysis

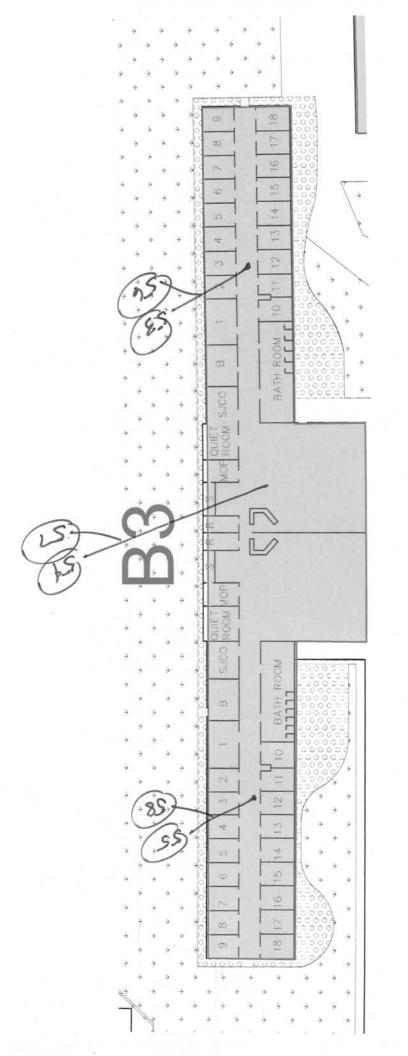
<u>Code</u>	<u>Description</u>
18/A01	EPA 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

For the National Voluntary Laboratory Accreditation Program

APPENDIX 2

SAMPLE LOCATION MAP (NOT TO SCALE)





APPENDIX 3 PHOTO DOCUMENTATION

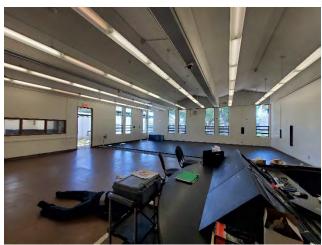
Building 3



1. View of Exterior



2. View of Exterior



3. Typical View of Common Room



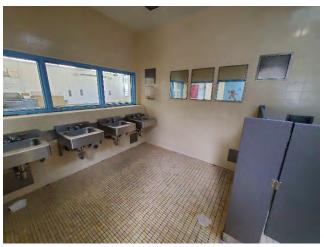
4. Typical View of Common Room



5. Common Area Ceiling



6. Typical View of Hallways



7. Typical View of Bathrooms



8. Typical View of Staff Bathrooms



9. Typical View of Cell.



10. Typical View of Pipe Chase in Hallways



11. View of Fiberglass Pipe and ACM Elbows.



12. ACM Pipe Elbow (Staff Bathroom)



13. Another Exterior View



14. Exterior Canopy

APPENDIX 4 INSPECTOR CERTIFICATIONS

California Certified Asbestos Consultant (CAC)

Card Holder: <u>Michelle Ehresman</u>

Certification Number: <u>14-5323</u> Exp.: <u>11/19/2024</u>

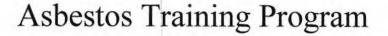
Current Employer: MTGL, Inc.

Supporting Certifications:

AHERA Contractor/Supervisor Refresher Certification
 AHERA Building Inspector Refresher Certification
 AHERA Management Planner Refresher Certification
 AHERA Project Designer Refresher Certification
 Exp. 7/27/2024
 Exp. 7/27/2024
 Exp. 8/16/2024



MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126 858-537-3999



This is to certify

Michelle Ehresman 1656

Has successfully completed 8 hours of formal training required by section 206 of TSCA II entitled

Contractor/Supervisor Refresher

Presented By **Environmental Compliance Training** PO BOX 16555 San Diego, CA. 92176-6555

(858) 558-7465

Director:

Walter T. Amenta, CIH, Approval Number CA-029-04

Class Dates:

06-24-2023

Exam Date:

n/a

Expiration Date: 06-24-2024

Certification Number: 0623ABCA167303

Certificate Of Completion

Asbestos Building Inspector Refresher Course

DOSH #: CA-015-06

Michelle Ehresman

ABIR0727230010N35227

David Wallach

Principal Instructor

7/27/2023

Course Start Date

7/27/2023

Course End Date

Michael W. Horner

Training Director

7/27/2023 Exam Date 7/27/2024

Expiration Date

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



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National Association of Training and Environmental Consulting



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Important Industry Contacts

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(916) 483-0572 Fax Notification Web: www.dir.ca.gov or calosha.com

CDPH/CLPPB:Ph# (510) 620-5600

Web: www.cdph.ca.gov/programs/CLPPB

SCAQMD:

Ph# (909) 396-3739

Fax#(909) 396-3342

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This Card Acknowledges That Michelle Ehresman

Holds Training Certification For Asbestos Building Inspector Refresher Course

Expiration: 7/27/2024

ABIR0727230010N35227

Michael W. Horner Training Director

Certificate Of Completion

Asbestos Project Designer Refresher Course

DOSH #:CA-015-10

Michelle Ehresman

APDR0816230004N35415

Norm Kramer

Principal Instructor

8/16/2023 Course Start Date 8/16/2023

Course End Date

8/16/2023

Exam Date

Michael W. Horner

Training Director

8/16/2024

Expiration Date

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



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*Note: Card is not suitable substitute for certificate and is not accepted by SCAQMD as proof of
certification
This Card Askinguidades That

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Holds Training Certification For Asbestos Project Designer Refresher Course

Expiration: 8/16/2024

Training Date 8/16/2023 APDR0816230004N35415

Michael W. Horner Training Director

Certificate Of Completion

Asbestos Management Planner Refresher Course

DOSH #:CA-015-08

Michelle Ehresman

AMPR0727230007N35357

David Wallach

Principal Instructor

7/27/2023

Course Start Date

7/27/2023

Course End Date

7/27/2023 Exam Date

Training Director

Michael W. Horner

7/27/2024 **Expiration Date**

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



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This Card Acknowledges That Michelle Ehresman

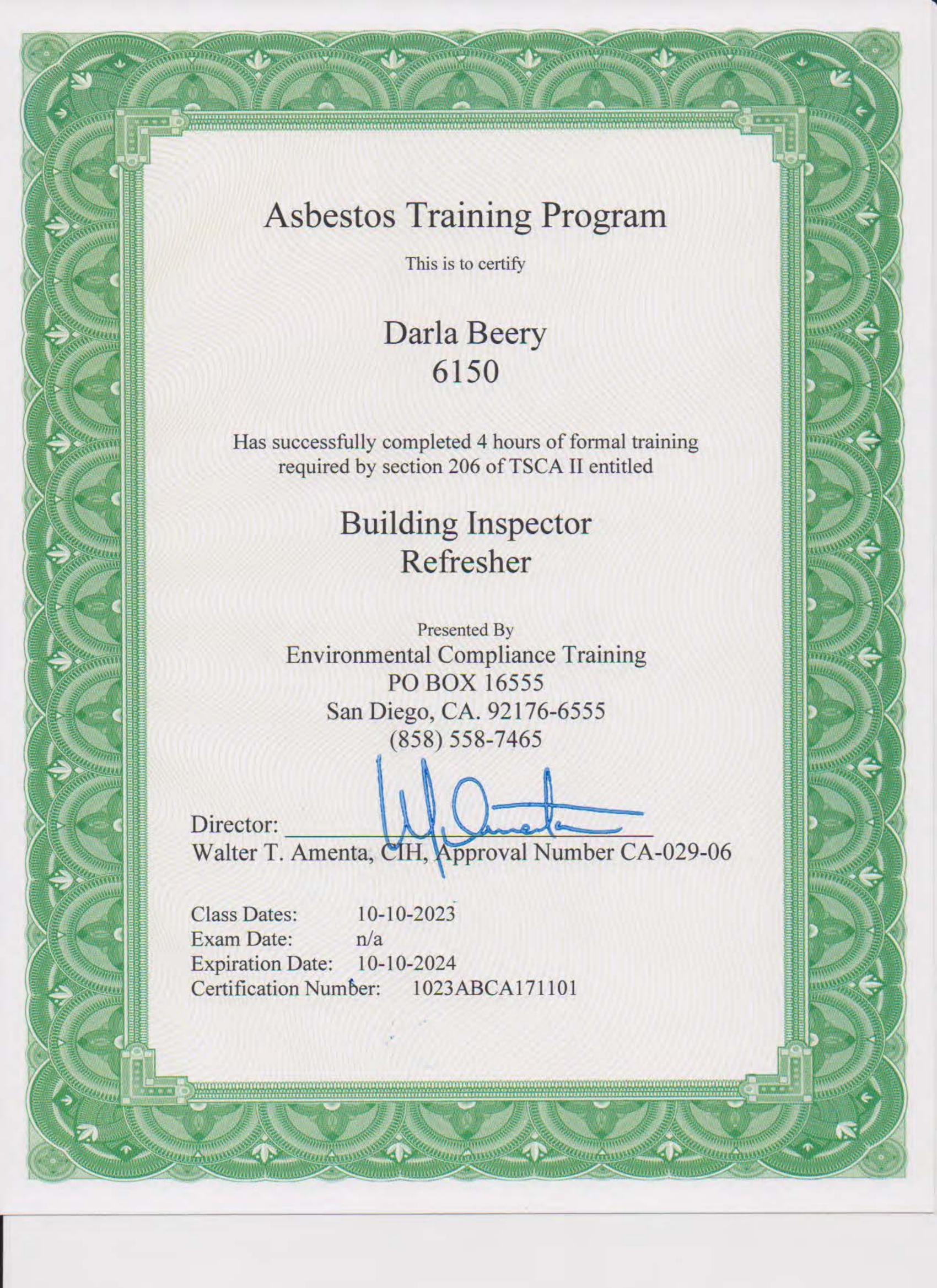
Holds Training Certification For Asbestos Management Planner Refresher Course

Expiration: 7/27/2024

7/27/2023 Training Date AMPR0727230007N35357 Certificate No.

Michael W. Homer Training Director

Darla Beery AHERA Building Inspector Certification



LEAD-BASED PAINT INSPECTION REPORT

Juvenile Hall-Building 3 331 The City Drive, S Orange, California 92868

Prepared for:

Vanir Construction 4540 Duckhorn Drive, Suite 300 Sacramento, California 95834

Prepared by:

MTGL, Inc. 7742 Arjons Drive San Diego, California 92126 858-537-3999

Project Number:

SDPE-24-061.1CT

Michelle Ehresman, CAC, LIA/LPM, ICRA Certification Number: CDPH# 0458/0459

Report Issuance Date: April 27, 2024

TABLE OF CONTENTS

SECTION

INTRODUCTION	
General Information	
Authorization Performance	
Terrormance	
WARRANTY	
METHODOLOGY	
General References	
Lead Sampling Procedures Performance Characteristic Sheets	
renormance Characteristic Sheets	
SUMMARY of FINDINGS	
Lead-Based Paint Summary	
HAZARD CONTROL AND ABATEMENT OPTIONS &LEAD SAFE WORK PRACTICES	•••••
LEAD BASED PAINT DISCLOSURE	
APPENDICES	
Appendix 1 –XRF Data Report and Performance Characteristic Sheet	
Appendix 2 – Site Drawing	
Appendix 3 – Glossary	
Appendix 4 – Inspector Certification	
Appendix 5 – CDPH 8552 Form	
Appendix 6 – Renovate Right	

GENERAL INFORMATION

MTGL was retained by Vanir Construction to conduct a lead-based paint inspection at the subject property located at 331 The City Drive in Orange, California 92868. All inspections were in accordance with the guidelines set forth in the U.S. Department of Housing and Urban Development. This document is prepared for the sole use of Vanir Construction and/or any Regulatory or Governmental agencies that may directly become involved with this project.

MTGL's scope of work was limited to the following Client specified locations at the property:

• Building 3 (Single story, wood frame with concrete block on a concrete slab.)

PURPOSE

The purpose of this inspection is to identify and assess painted components at the subject location above specified regulatory action levels within the Client specified scope of work.

AUTHORIZATION

Authorization to perform the survey was given by Mr. Scott Battles with a notice to proceed via proposal SDPE-24-061.1CT.

PERFORMANCE

All visual inspections and component testing was performed in accordance with Federal, State and local requirements. The inspection was performed by Michelle Ehresman, a California Certified Lead Inspector/Assessor on March 29, 2024.

LEAD-BASED PAINT SURVEY

MTGL, Inc. warrants that the findings contained herein have been prepared with the level of care and skill exercised by experienced and knowledgeable environmental consultants who are appropriately licensed or otherwise trained to perform lead-based paint assessments pursuant to the scope of work required on this project.

MTGL, Inc. warrants that the findings contained herein have been prepared in general accordance with accepted professional practices as applied by similar professionals in the community at the time of its preparation. Changes in the state of the art or in applicable regulations cannot be anticipated and have not been addressed in this report.

The survey included the inspection of accessible materials only. MTGL did not inspect or sample inaccessible areas such as behind walls or within ductwork and did not dismantle any part of the structure to survey inaccessible areas. For the purpose of this warranty, inaccessible is defined as areas of the building that could not be tested (sampled) without destruction of the structure or a portion of the structure. Inaccessible materials that are visible to MTGL inspectors shall be assumed to be lead-based paint coated.

It is the owner's legal obligation to disclose the inspection results to tenants and/or purchasers before obligation under 24 CFR part 35 and 40 CFR part 745 (published in the Federal Register, Volume 61, Number 45, March 6, 1996, starting on P. 9064; copies of the regulations and related materials can be obtained from the National Lead Information Center Clearinghouse, (1-800-424-LEAD)

GENERAL REFERENCES

LEAD-BASED PAINT

Lead-based paint testing was conducted in accordance with the Title 17, California Code of Regulations, Division 1, Chapter 8, Accreditation, Certification and Work Practices in Lead-Related Construction, Section 36000 and the United States Department of Housing and Urban Developments *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, Chapter 7 Lead-Based Paint Inspections*, as published in June 1995 and revised in 1997.

The State of California, HUD and the EPA currently define lead-based paint as paints or other surface coatings, which contain lead equal to or greater than 1.0 milligrams of lead per square centimeter of surface area (mg/cm²), or equal to or greater than 0.5% by weight.

Lead-based paint testing was conducted using portable x-ray fluorescence (XRF) spectrum analyzer, Model Niton XLP 300, Manufactured by Niton, Inc. The Niton XLP 300 is calibrated to measure the K-shell x-ray emissions of lead. The K-shell is normally used for paint analysis because it measures lead in all layers of paint films, including the lower layers where higher concentrations of lead are usually found. An initial calibration and ending calibration is validated each day with a laminated Lead Paint Standards testing card which is provided by the manufacturer. The card is a direct comparison to the paint standard to NIST kit SRM2579a with a spectrum analyzer. If an instrument does not maintain consistent calibrations after following the manufacturer's recommendation, the unit is removed from the site and sent back to the manufacturer for service.

In the instance where paint chip samples are collected, sample collections are conducted by the requirements of the American Society of Testing and Materials standard E 1729, Standard Practice for Field Collection of Dried Paint Samples for Lead Determination by Atomic Spectrometry Techniques and HUD Guidelines.

Performance Characteristic Sheet (PCS)

Performance Characteristic Sheets for most XRF models can be found on the U.S. Department of Housing and Urban Developments Office of Healthy Homes and Lead Hazard Control website, specifically HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.(http://www.hud.gov/offices/lead/lbp/hudguidelines/index.cfm). Operating specification and procedures for the XRF used for this survey can be downloaded at the website above. PCS's can also be obtained by calling toll free to the National Lead Information Clearinghouse, at 800-424-LEAD. Persons with hearing or speech impediments may access the above number via TTY by calling the Federal Information Relay Service at 800-887-8339, toll free.

GENERAL SUMMARY

Lead-Based Paint Inspection Results

The purpose of the lead-based paint survey was to evaluate the referenced facility's painted components that may contain lead-based paint. Suspect components identified during the survey included but not limited to the following:

- Interior: Door and Window Components, Wall, Floor and Ceilings
- Exterior: Wall, Windows, and Doors

The following is a summary of lead based painted components identified that contain lead greater than 1.0 mg/cm² or greater * (Please see attachment I for a detail report of findings.)

- Intact lead-based paint greater than 1.0 mg/cm2 was identified on the green exterior, metal canopy and frame.
- Intact lead containing (>1.0 mg/cm2) yellow ceramic wall, base tile was identified in the staff bathrooms.
- Intact lead containing (>1.0 mg/cm2) yellow countertop and wall tile was identified in the kitchenettes.
- Deteriorated lead containing (>1.0 mg/cm2) porcelain sinks were identified in the mop/storage rooms.

*MTGL, Inc. is not responsible for actual quantity of the material(s). MTGL recommends bidding contractors to calculate quantities for estimated abatement costs. When evaluating this report, it is assumed that according to Chapter 7 HUD guidelines, that if one testing combination (i.e. window, door) is positive for lead in an interior or exterior room equivalent, that all other similar testing combinations in those areas are assumed to be positive.

Intact lead-based paint was identified on the accessible components tested as well as lead containing, ceramic walls, base tile, countertop tile and white porcelain sinks were identified and Title 8, CCR Section 1532.1 will apply to minimize a lead dust hazard and work protection during demolition.

When evaluating this report, it is assumed that according to Chapter 7 HUD guidelines, that if one testing combination (i.e. window, door) is positive for lead in an interior or exterior room equivalent, that all other similar testing combinations in those areas are assumed to be positive.

Current EPA and Cal/EPA regulations do not require lead-based paint to be removed prior to demolition, unless found to be loose and peeling. Provided that paints are securely adhered to the

substrates, deposal of the debris can be handled in California as non-hazardous and non-RCRA waste, pending characterization of the waste.

Loose and peeling paints or other wastes exceeding the Total Threshold Level Concentration (TTLC) of 1,000 ppm ($\mu g/g$) would be required to be disposed of as non-RCRA hazardous waste. However, if the leachable lead contents of the wasted exceed the Soluble Threshold Level Concentrations (STLC) of 5 mg/liter, the wastes must be disposed of as RCRA waste.

Several government agencies have definitions for what amount of lead constitutes paint to be considered "lead-based". The Department of Housing and Urban Development (HUD) has designated the amount to be 1.0 mg/cm², 0.5% by weight or 5000 ppm (parts per million). The HUD regulations are related to potential hazards in the home environment and not to construction activities. The amount designated for high contact play areas is 400 ppm.

Lead Safe Work Practice Requirements for Maintenance, Renovation or Remodeling

EPA's RRP Rule requires anyone (remodeling, renovation and painting contractors and most other trades) who works in pre-1978 housing for compensation and who might disturb painted surfaces to become an EPA Certified Renovator by taking an 8-hour RRP "Lead Safe Work Practices" class from an EPA accredited training provider. The initial certification is good for five (5) years. To "renew" contractors must take a 4-hour RRP Refresher class before their initial certification expires. The RRP rule applies to anyone who works for compensation in pre-1978 housing and/or child-occupied facilities who might disturb painted surfaces, including:

- General contractors
- Demolition workers
- Remodeling contractors
- Maintenance workers in multi-family housing
- Painters, plumbers and most specialty trades.

The RRP rule covers a lot of jobs: renovation, remodeling, painting, window replacement, plumbing, electrical work, heating & air-conditioning, demolition, plus work performed by trades like carpenters, electricians and handymen. The rule also applies to persons working for rental property owners, schools, and day care providers. And, it applies to non-profits and governmental agencies. The RRP Rule requires that "Lead Safe Work Practices" be used when disturbing more than 6 square feet per room or 20 square feet outside.

It shall be noted that California's lead-based paint regulations cover ALL pre-78 structures that have not been tested - not just Target Housing and Child-Occupied Facilities. (Title 17, CCR, Div 1, Ch 8). Since 2003, California law (Title 17) has required that "Lead Safe Work Practices" be used in ALL pre-1978 structures when disturbing any amount of known or "presumed" lead-based paint. Contractors may have taken additional training to meet State of California requirements for Lead-Related Construction and obtain the required California Department of Public Health-Lead Related Construction Certifications for permanent abatement. This certification supplements but does not replace the EPA RRP certification. CDPH State Certified

Lead Abatement Supervisors and Workers must also become RRP certified, and abatement firms must also be RRP Certified if they do non-abatement jobs.

Contractors and renovators who work or compensation in pre-1978 housing and/or a child-occupied facility that will disturb painted surfaces greater than 6 square feet per room or 20 square feet outside must give Clients a pamphlet called "Renovate Right" and get a signed receipt before beginning a job. Contractors can call (800) 424-5323 and ask for free copies of "Renovate Right" and the "Small Entity Compliance Guide to Renovate Right" or both can be downloaded as PDF files from the EPA website.

The Consumer Product Safety Commission (CPSC) has defined lead-based paint as surface coatings containing lead concentrations greater than 90 ppm. All children's products, and some furniture, for adult and children, must not contain a concentration of lead greater than 0.009 percent (90 parts per million) in paint or any similar surface coatings. Household paint must also meet this requirement. In 1978, the CPSC banned the sale of lead-based paint to consumers and the use of lead-based paint in residences and public buildings.

Please note that the detection of any amount of lead in a component will trigger numerous requirements from the California Occupations Safety and Health Administration (Cal-OSHA) lead in construction standard (e.g., Title 8, CCR Section 1532.1), even with common tasks such as drywall demolition, manual paint scraping, and manual paint sanding. The employer is required to conduct air sampling to determine the exposure to lead during these tasks and during other tasks that could result in lead exposure. Until actual exposures are determined, workers are required to wear respirators that are appropriate to the task. Detailed requirements are published in the Cal-OSHA standard for lead in construction.

All workers who may be exposed to lead must be trained in the hazards of lead. The results of air sampling are used to determine if workers are exposed to lead above the action level (AL) of 30 micrograms per cubic meter of air or above the permissible exposure limit (PEL) of 50 micrograms of lead per cubic meter of air, averaged over an 8-hour shift. Exposures above the AL or PEL will trigger additional requirements including engineering controls, proper housekeeping, washing facilities for hand and face washing, additional worker training, respiratory protection, medical monitoring, and additional air sampling. The employer must have a written compliance plan.

Lead Paint

Interim controls which are temporary measures may include the following:

- Paint Film Stabilization: "scrape off the loose and flakey paint and reapply with regular house paint".
- Friction (places that rub) and Impact (places that are bumped or banged) Surface Treatments (Doors, windows, cabinets, floors, etc): treated by covering the surfaces with an abrasion-resistant material, or by repairing to an intact working condition in order to minimize dust.
- Special Cleaning: reduction of lead hazard by cleaning up visible dust by HEPA vacuuming, washing and HEPA vacuuming again.

Interim controls typically last less than 20 years and will require the reevaluation of components on a periodic basis.

As of April 22, 2010, the EPA passed the Renovator, Repair and Paint Rule (RRP) (40 CFR Part 745.90) which states all renovation and painting contractors and other trades who work in pre-1978 housing and who might disturb painted surfaces must become Lead Certified Renovators by taking a one-day course about using "Lead Safe Work Practices" on the job.

Abatement methods which eliminate or put a barrier in front of lead hazards may include the following:

- Encapsulation: covering lead paint with a special liquid or thick coating (not regular paint). Works well on surfaces that are in good condition and should not be used on friction or impact surfaces.
- Enclosure: covering lead paint with a solid, dust-tight barrier that is usually mechanically attached (sheetrock, paneling, drywall).
- Replacement: removal of lead covered components (doors, windows, molding) and replacing with lead free components.
- Removal: recommended when other options may not be feasible; removal of lead paint by means of heat guns, scraping and sanding, power tools, chemical stripping and/or use of abrasives and hydro blasting.

Abatement controls typically last more than 20 years. Abatement methods that will result in the smallest amount of dust generated are preferred. Workers who partake in the above abatement methods should be California State Certified Lead Supervisors and Workers. Clearance sampling after abatement must be conducted by a certified lead-based paint inspector

Lead Safe Work Practice Requirements for Maintenance, Renovation or Remodeling

Lead-based paint, deteriorated paint or lead-based hazards require lead safe work practices. These practices are necessary for regular lead based paint hazard controls, repair, remodeling, renovation or other work activities that may disturb lead based paint above HUD's de minimis levels. HUD describes de minimus levels as follows:

- 20 square feet on exterior surfaces
- 2 square feet in any one interior room or space
- 10% of a type of building component with a small surface area (such as painted windowsills) on interior or exterior surfaces

Workers who may disturb lead-based paint above the de minimis level during repair, renovation or maintenance activities or any other work efforts that disturbs a known or assumed lead-based paint above HUD's de minimis shall be trained in lead safe work practices.

Firms providing abatement services must be certified as an abatement firm by the EPA or the State. Workers conducting abatement must be trained and certified as abatement workers by a training provider accredited by the EPA or State.

SECTION 6 DISCLOSURE

A copy of this summary must be provided to new lessees (tenants) and purchasers of this property under Federal Law (24 CFR part 35 and 40 CFR part 745) before they become obligated under a lease or sales contract. The complete report must also be provided to new purchasers and it must be made available to new tenants. Landlords (lessors) and sellers are also required to distribute an educational pamphlet and include standard warning language in their leases or sales contracts to ensure that parents have the information they need to protect their children from lead-based paint hazards.

It is the owner's legal obligation to disclose the inspection results to tenants and/or purchasers before obligation under 24 CFR part 35 and 40 CFR part 745 (published in the Federal Register, Volume 61, Number 45, March 6, 1996, starting on P. 9064; copies of the regulations and related materials can be obtained from the National Lead Information Center Clearinghouse, (1-800-424-LEAD).

SECTION 7 Appendices

Appendix 1

XRF Data Sheet

and

Performance Characteristic Sheet (PCS)

Lead Based Paint XRF Data Sheet -Positive Locations

Project: Vanir- Juvenile Hall-Building 3, 331 The City Drive, Orange, CA 92868

Inspection Date: March 29, 2024

(EPA Regulated Lead-Based Paint= 1.0 mg/cm²)

(County of Los Angeles= 0.7mg/cm²) (<LOD= Below Limit of Detection)

					Com	ponent					
Sample #	Unit	Side	Location	Test Location	Structure	Member	Paint Condition	Substrate	Color	XRF Reading (mg/cm2)	Classification (pos, neg, inc.)
1			Calibration						Red NIST	1.0	
2			Calibration						Red NIST	0.9	
3			Calibration						Red NIST	0.9	
4	B3-R	C	Common Rm	Kitchen	Counter	Tile	Intact	Ceramic	Yellow	7.1	Positive
5	B3-R	C	Common Rm	Kitchen	Wall	Backsplash	Intact	Ceramic	Yellow	6.9	Positive
6	B3-R	С	Staff RR	Wall	Base	Tile	Intact	Ceramic	Yellow	6.7	Positive
7	B3-R		Mop Room	Wall	Sink		Poor	Porcelain	White	9.1	Positive
8	B3-S	С	Common Rm	Kitchen	Counter	Tile	Intact	Ceramic	Yellow	5.9	Positive
9	B3-S	С	Common Rm	Kitchen	Wall	Backsplash	Intact	Ceramic	Yellow	6.1	Positive
10	B3-S	C	Staff RR	Wall	Base	Tile	Intact	Ceramic	Yellow	4.8	Positive
11	B3-S		Mop Room	Wall	Sink		Poor	Porcelain	White	6.0	Positive
12	В3		Exterior	Canopy	Lid		Intact	Metal	Green	9.3	Positive
13	В3		Exterior	Canopy	Frame		Intact	Metal	Green	4.2	Positive
			Calibration						Red NIST	0.9	Calibration

Performance Characteristic Sheet

EFFECTIVE DATE: September 24, 2004 EDITION NO.: 1

MANUFACTURER AND MODEL:

Make: Niton LLC
Tested Model: XLp 300
Source: 109Cd

Note: This PCS is also applicable to the equivalent model variations indicated

below, for the Lead-in-Paint K+L variable reading time mode, in the XLi and

XLp series:

XLi 300A, XLi 301A, XLi 302A and XLi 303A. XLp 300A, XLp 301A, XLp 302A and XLp 303A. XLi 700A, XLi 701A, XLi 702A and XLi 703A. XLp 700A, XLp 701A, XLp 702A, and XLp 703A.

Note: The XLi and XLp versions refer to the shape of the handle part of the instrument. The differences in the model numbers reflect other modes available, in addition to Lead-in-Paint modes. The manufacturer states that specifications for these instruments are identical for the source, detector, and detector electronics relative to the Lead-in-Paint mode.

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

Lead-in-Paint K+L variable reading time mode.

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm² (inclusive)

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm² in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm² film).

If readings are outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instruments into control before XRF testing proceeds.

SUBSTRATE CORRECTION:

For XRF results using Lead-in-Paint K+L variable reading time mode, substrate correction is <u>not</u> needed for: Brick, Concrete, Drywall, Metal, Plaster, and Wood

INCONCLUSIVE RANGE OR THRESHOLD:

K+L MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm²)
Results not corrected for substrate bias on any	Brick	1.0
substrate	Concrete	1.0
	Drywall	1.0
	Metal	1.0
	Plaster	1.0
	Wood	1.0

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* ("HUD Guidelines"). Performance parameters shown on this sheet are calculated from the EPA/HUD evaluation using archived building components. Testing was conducted in August 2004 on 133 testing combinations. The instruments that were used to perform the testing had new sources; one instrument's was installed in November 2003 with 40 mCi initial strength, and the other's was installed June 2004 with 40 mCi initial strength.

OPERATING PARAMETERS:

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

SUBSTRATE CORRECTION VALUE COMPUTATION:

Substrate correction is not needed for brick, concrete, drywall, metal, plaster or wood when using Lead-in-Paint K+L variable reading time mode, the normal operating mode for these instruments. If substrate correction is desired, refer to Chapter 7 of the HUD Guidelines for guidance on correcting XRF results for substrate bias.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing. Use the K+L variable time mode readings.

Conduct XRF retesting at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below.

Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family housing a result is defined as the average of three readings. In multifamily housing, a result is a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF results.

Compute the average of all ten re-test XRF results.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

TESTING TIMES:

For the Lead-in-Paint K+L variable reading time mode, the instrument continues to read until it is moved away from the testing surface, terminated by the user, or the instrument software indicates the reading is complete. The following table provides testing time information for this testing mode. The times have been adjusted for source decay, normalized to the initial source strengths as noted above. Source strength and type of substrate will affect actual testing times. At the time of testing, the instruments had source strengths of 26.6 and 36.6 mCi.

Testing Times Using K+L Reading Mode (Seconds)								
		All Data		Median for laboratory-measured lead levels (mg/cm²)				
Substrate	25 th Percentile	Median	75 th Percentile	Pb < 0.25	0.25 <u><</u> Pb<1.0	1.0 <u><</u> Pb		
Wood Drywall	4	11	19	11	15	11		
Metal	4	12	18	9	12	14		
Brick Concrete Plaster	8	16	22	15	18	16		

CLASSIFICATION RESULTS:

XRF results are classified as positive if they are greater than or equal to the threshold, and negative if they are less than the threshold.

DOCUMENTATION:

A document titled *Methodology for XRF Performance Characteristic Sheets* provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. For a copy of this document call the National Lead Information Center Clearinghouse at 1-800-424-LEAD.

This XRF Performance Characteristic Sheet was developed by the Midwest Research Institute (MRI) and QuanTech, Inc., under a contract between MRI and the XRF manufacturer. HUD has determined that the information provided here is acceptable when used as guidance in conjunction with Chapter 7, Lead-Based Paint Inspection, of HUD's *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*.

APPENDIX 2 SITE DRAWING

18 17 16 ij 14 13 12 11 SJCO ROC Side A 12,121

positive Jample Location 71.0 mg/cm2 Appendix 3

Glossary





Glossary

AALA: American Association for Laboratory Accreditation. Also known as A2LA.

Abatement: A measure or set of measures designed to permanently eliminate lead-based paint hazards or lead-based paint. Abatement strategies include the removal of lead-based paint, enclosure, encapsulation, replacement of building components coated with lead-based paint, removal of lead-contaminated dust, and removal of lead-contaminated soil or overlaying of soil with a durable covering such as asphalt (grass and sod are considered interim control measures). All of these strategies require preparation; cleanup; waste disposal; postabatement clearance testing; recordkeeping; and, if applicable, monitoring. See also Complete abatement and Interim controls.

Abrasion resistance: Resistance of the paint to wear by rubbing or friction; related to both toughness and gloss.

Accessible surface: Any protruding interior or exterior surface, such as an interior window sill, that a young child can mouth or chew.

Accreditation: A formal recognition that an organization, such as a laboratory, is competent to carry out specific tasks or types of tests.

Accredited laboratory: A laboratory that has been evaluated and approved by the National Lead Laboratory Accreditation Program (NLLAP), to perform lead measurement or analysis, usually over a specified period of time.

Accredited training provider: A training provider who meets the standards established by EPA for the training of risk assessors, inspectors, lead-based paint hazard control contractors, and workers.

Accuracy: The degree of agreement between an observed value and an accepted reference value (a "true" value); a data quality indicator. Accuracy includes a combination of random errors (precision) and systematic errors (bias) due to sampling and analysis.

Acrylic: A synthetic resin used in highperformance waterborne coatings; a coating whose binder contains acrylic resins.

Adhesion: The ability of dry paint or other coating to attach to a surface and remain fixed on it without blistering, flaking, cracking, or being susceptible to removal by tape.

Administrative removal: The temporary removal of workers from the job to prevent the concentration of lead in their blood from reaching levels requiring medical removal.

AIHA: American Industrial Hygiene Association.

ALC: See Apparent Lead Concentration.

Aliquot: See Subsample.

Alkali: A chemical, such as Iye, soda, lime, etc., that will neutralize an acid. Oil paint films can be destroyed by alkalies. Some paint removal products contain alkaline substances.

Alkyd: Synthetic resin modified with oil; coating that contains alkyd resins in the binder.

Apparent Lead Concentration (ALC): The x-ray fluorescence (XRF) reading or average of more than one reading on a painted surface. See also XRF analyzer, Substrate Equivalent Lead (SEL), and Corrected Lead Concentration (CLC).

Bare soil: Soil not covered with grass, sod, some other similar vegetation, or paving, including the sand in sandboxes.





Bias: A systematic error in the measurement process. For XRF readings, one source of bias is the substrate effect. See also Substrate effect and XRF analyzer.

Biennial report (for hazardous waste): A report (EPA Form 8700–13A) submitted by generators of hazardous waste to the EPA Regional Administrator. The report is due on March 1 of even-numbered years. The report includes information on the generator's activities during the previous calendar year. The owners and operators of treatment, storage, and disposal facilities must also prepare and submit biennial reports using EPA Form 8700–1313.

Binder: Solid ingredients in a coating that hold the pigment particles in suspension and bind them to the substrate. Binders used in paints and coatings include oil, alkyd, acrylic, latex, and epoxy. The nature and amount of binder determines many of the coating's performance properties—washability, toughness, adhesion, gloss, etc. See also Pigment.

Biological monitoring: The analysis of blood, urine, or both to determine the level of lead contamination in the body. Blood lead levels are expressed in micrograms of lead per deciliter (one-tenth of a liter) of blood, or $\mu g/dL$. They are also expressed in micromoles per liter ($\mu mol/L$).

Blank: A nonexposed sample of the medium being used for testing (i.e., wipe or filter) that is analyzed to determine if the medium has been contaminated with lead (e.g., at the factory or during transport).

Blind sample: A subsample submitted for analysis with a composition and identity known to the submitter but not to the analyst; used to test the analyst's or laboratory's proficiency in conducting measurements. See also Spiked sample.

Blood lead threshold: Any blood lead level greater than or equal to 10 $\mu g/dL$ as defined by the Centers for Disease Control and Prevention. See also Elevated Blood Lead level (EBL) child.

Building component: Any element of a building that may be painted or have dust on its surface, e.g. walls, stair treads, floors, railings, doors, window sills, etc.

Building component replacement: See Replacement.

Cementitious material: A material that is mixed with water, either with or without aggregate, to provide the plasticity, cohesion, and adhesion necessary for the placement and formation of a rigid mass (ASTM Standard C 11).

Centimeter: See cm.

Certification: The process of testing and evaluating against certain specifications the competence of a person, organization, or other entity in performing a function or service, usually for a specified period of time.

Certified: The designation for contractors who have completed training and other requirements to allow them to safely undertake risk assessments, inspections, or abatement work. Risk assessors, inspectors, and abatement contractors should be certified by the appropriate local, State or Federal agency.

Certified Industrial Hygienist (CIH): A person who has passed the 2-day certification exam of the American Board of Industrial Hygiene, and who has at least 4 years of experience in industrial hygiene and a graduate degree or a total of 5 years of experience. See also Industrial hygienist.

Certified reference material (CRM): Reference material that has at least one of its property values established by a technically valid procedure and is accompanied by or traceable to a certificate or other documentation issued by a certifying body. See also Standard reference material.

CFR: See Code of Federal Regulations.

Chalking: The photo-oxidation of paint binders—usually due to weathering—that causes a powder to form on the film surface.





Characteristics (of hazardous waste): EPA has identified four characteristics of hazardous waste: ignitability, corrosivity, reactivity, and toxicity (as determined by the TCLP test). Any solid waste that exhibits at least one of these characteristics may be classified as hazardous under the Resource Conservation and Recovery Act (RCRA), depending on how the waste is produced and what quantities are generated. See also Toxicity Characteristic Leaching Procedure (TCLP).

Chewable surface: See Chewed surface and Accessible surface.

Chewed surface: Any painted surface that shows evidence of having been chewed or mouthed by a young child. A chewed surface is usually a protruding, horizontal part of a building, such as an interior window sill. See also Accessible surface.

CLC: See Corrected Lead Concentration (CLC).

Cleaning: The process of using a HEPA vacuum and wet cleaning agents to remove leaded dust; the process includes the removal of bulk debris from the work area. OSHA prohibits the use of compressed air to clean lead-contaminated dust from a surface.

Clearance examination: Visual examination and collection of environmental samples by an inspector or risk assessor and analysis by an accredited laboratory upon completion of an abatement project, interim control intervention, or maintenance job that disturbs lead-based paint (or paint suspected of being lead-based). The clearance examination is performed to ensure that lead exposure levels do not exceed standards established by the EPA Administrator pursuant to Title IV of the Toxic Substances Control Act, and that any cleaning following such work adequately meets those standards.

Clearance examiner: A person who conducts clearance examinations following lead-based paint hazard control and cleanup work, usually a certified risk assessor or a certified inspector.

cm: Centimeter; 1/100 of a meter.

Code of Federal Regulations (CFR): The codification of the regulations of Federal agencies. The regulations are published in the Federal Register. See also Federal Register (FR).

Cohesion: Ability of a substance to adhere to itself; internal adhesion; the force holding a substance together.

Common area: A room or area that is accessible to all residents in a community (e.g., hallways or lobbies); in general, any area not kept locked.

Competent person: As defined in the OSHA Lead Construction Standard (29 CFR 1926.62), a person who is capable of identifying or predicting hazardous working conditions and work areas, and who has authorization to take prompt, corrective measures to eliminate the hazards. A competent person is not necessarily a risk assessor, inspector, or abatement project supervisor.

Complete abatement: Abatement of all lead-based paint inside and outside a dwelling or building and reduction of any lead-contaminated dust or soil hazards. All of these strategies require preparation; cleanup; waste disposal; postabatement clearance testing; recordkeeping; and, if applicable, reevaluation and on-going monitoring. See also Abatement.

Compliance plan: A document that describes the types of tasks, workers, protective measures, and tools and other materials that may be employed in lead-based paint hazard control to comply with the OSHA Lead Exposure in Construction standard.

Composite sample: A single sample made up of individual subsamples. Analysis of a composite sample produces the arithmetic mean of all subsamples.

Containment: A process to protect workers and the environment by controlling exposures to the lead-contaminated dust and debris created during abatement. See Worksite preparation level.





Contingency plan: A document that describes an organized, planned, and coordinated course of action to be taken during any event that threatens human health or the environment, such as a fire, explosion, or the release of hazardous waste or its constituents from a treatment, storage, or disposal facility.

Corrected Lead Concentration (CLC): The absolute difference between the Apparent Lead Concentration and the Substrate Equivalent Lead. See also Apparent Lead Concentration (ALC) and Substrate Equivalent Lead (SEL).

Detection limit: The minimum amount of a substance that can be reliably measured by a particular method.

Deteriorated lead-based paint: Any lead-based paint coating on a damaged or deteriorated surface or fixture, or any interior or exterior lead-based paint that is peeling, chipping, blistering, flaking, worn, chalking, alligatoring, cracking, or otherwise becoming separated from the substrate.

Digestion blank: A mixture of the reagents used for digesting of paint, soil, or dust matrixes but without the matrix. The blank undergoes all the steps of the analysis, starting with digestion. The blank is used to evaluate the contamination process from a laboratory.

Direct-reading XRF: An analyzer that provides the operator with a display of lead concentrations calculated from the lead K x ray intensity without a graphic of the spectrum usually in mg/cm² (milligrams of lead per square centimeter of painted surface area). See also XRF analyzer.

Disposal (of hazardous waste): The discharge, deposit, injection, dumping, spilling, leaking, or placement of solid or hazardous waste on land or in water so that none of its constituents can pollute the environment by being emitted into the air or discharged into a body of water, including groundwater.

Disposal facility: A facility or part of one in which hazardous waste is placed on land or in water to remain there after the facility closes.

Door mat: See Walk-off mat.

Dust removal: A form of interim control that involves initial cleaning followed by periodic monitoring and recleaning, as needed. Depending on the severity of lead-based paint hazards, dust removal may be the primary activity or just one element of a broader control effort.

Dust trap: A surface, component, or furnishing that serves as a reservoir where dust can accumulate.

EBL child: See Elevated Blood Lead level (EBL) child.

Efflorescence: The salt rising to the surface of a material, such as masonry, plaster, or cement, caused by the movement of water through the material. Paint or encapsulants may not adhere to a surface contaminated with efflorescence.

Elastomeric: A group of pliable, elastic liquid encapsulant coatings. An elastomer is a macromolecular material which, at room temperature, is capable of substantially recovering its size and shape after the force causing its deformation is removed (see ASTM D 907, D-14).

Elevated Blood Lead level (EBL) child: A child who has a blood lead level greater than or equal to 20 μg/dL or a persistent 15 μg/dL. See also Blood lead threshold.

Encapsulation: Any covering or coating that acts as a barrier between lead-based paint and the environment, the durability of which relies on adhesion and the integrity of the existing bonds between multiple layers of paint and between the paint and the substrate. See also Enclosure.

Enclosure: The use of rigid, durable construction materials that are mechanically fastened to the substrate to act as a barrier between the lead-based paint and the environment.





Engineering controls: Measures other than respiratory protection or administrative controls that are implemented at the work site to contain, control, and/or otherwise reduce exposure to lead-contaminated dust and debris usually in the occupational health setting. The measures include process and product substitution, isolation, and ventilation.

Epoxy paint: Paint based on an epoxy resin. An epoxy resin is a cross-linking resin the reactivity of which depends on the epoxide group.

Evaluation: Risk assessment, paint inspection, reevaluation, investigation, clearance examination, or risk assessment screen.

Examination: See Clearance examination.

Examiner: A person certified to conduct clearance examinations or reevaluations, usually a certified inspector or certified risk assessor.

Exposure monitoring: The sampling and analysis of air both inside and outside the work area to determine the degree of worker and resident exposure to lead or other airborne contaminants, often involving air sampling inside a worker's breathing zone.

Exterior work area: For lead hazard control work, the exterior work area includes any exterior building components, such as a porch or stairway; the safety perimeter; and access barriers.

Facility (pertaining to hazardous waste): All buildings, contiguous land, structures, and other appurtenances, as well as any improvements, where lead-based paint or hazardous waste is treated, stored, or disposed. A facility may consist of several different treatment, storage, or disposal units, such as landfills and surface impoundments.

Federal Register (FR): A daily Federal publication that contains proposed and final regulations, rules, and notices.

Fibermat: A semirigid woven material attached with a liquid adhesive to a surface or substrate.

Field blank: A clean sample of the matrix (e.g., filter, or wipe) that has been exposed to the sampling conditions; returned to the laboratory; and analyzed as an environmental sample. Clean quartz sand, air sampling filters and cassettes, and clean wipes can be used as field blanks. The field blank, which should be treated just like the sample, indicates possible sources of contamination.

FR: See Federal Register (FR).

Friction surface: Any interior or exterior surface, such as a window or stair tread, subject to abrasion or friction.

Generator: Any person whose act or operation produces hazardous waste identified or listed in 40 CFR Part 261 or whose act causes a hazardous waste to come under regulation (40 CFR 260.10).

Generator identification number: The unique number assigned by EPA to each generator; transporter of hazardous waste; and treatment, storage, or disposal facility.

Hazardous waste: As defined in EPA regulations (40 CFR 261.3), hazardous waste is solid waste or a combination of solid wastes that because of its quantity; concentration; or physical, chemical, or infectious characteristics may cause or significantly contribute to increases in mortality, serious and irreversible or incapacitating but reversible illnesses, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed. As defined in the regulations, solid waste is hazardous if it meets one of four conditions: (1) exhibits a characteristic of hazardous waste (40 CFR Sections 261.20 through 262.24); (2) has been listed as hazardous (40 CFR Section 261.31 through 261.33); (3) is a mixture containing a listed hazardous waste combined with a nonhazardous solid waste, unless the mixture is specifically excluded or no longer exhibits any of the characteristics of hazardous waste; and (4) is not excluded from regulation as hazardous waste. For lead-based paint abatement





waste, hazardous waste is waste that contains more than 5 ppm of leachable lead as determined by the TCLP test, or is waste that is corrosive, ignitable, or reactive and not otherwise excluded.

Hazardous Waste Manifest: See Manifest.

Heat gun: A device capable of heating leadbased paint causing it to separate from the substrate. For lead hazard control work, the heat stream leaving the gun should not exceed 1,100 °F (some authorities may use a different temperature).

HEPA filter: See High-Efficiency Particulate Air (HEPA) filter.

HEPA/wet wash/HEPA cycle: The cleaning cycle that begins with HEPA vacuuming, followed by a wet wash with a lead-specific cleaning agent, such as trisodium phosphate detergent or another liquid cleaning agent, followed by a final pass with a HEPA vacuum over the surface.

High-Efficiency Particulate Air (HEPA) filter: A filter capable of removing particles of 0.3 microns or larger from air at 99.97 percent or greater efficiency.

High phosphate detergent: See Trisodium phosphate (TSP) detergent.

Impact surface: An interior or exterior surface (such as surfaces on doors) subject to damage by repeated impact or contact.

Incinerator: An enclosed device using controlled flame combustion that neither meets the criteria for classification as a boiler nor is listed as an industrial furnace.

Industrial hygienist: A person having a college or university degree in engineering, chemistry, physics, medicine, or a related physical or biological science who, by virtue of special training, is qualified to anticipate, recognize, evaluate, and control environmental and occupational health hazards and the impact of those hazards on the community and workers.

In-place management: See Interim controls.

Inspection (of paint): A surface-by-surface investigation to determine the presence of lead-based paint (in some cases including dust and soil sampling) and a report of the results.

Inspector: An individual who has completed training from an accredited program and been licensed or certified by the appropriate State or local agency to (1) perform inspections to determine and report the presence of lead-based paint on a surface-by-surface basis through onsite testing, (2) report the findings of such an inspection, (3) collect environmental samples for laboratory analysis, (4) perform clearance testing, and (5) document successful compliance with lead-based paint hazard control requirements or standards.

Interim controls: A set of measures designed to temporarily reduce human exposure or possible exposure to lead-based paint hazards. Such measures include specialized cleaning, repairs, maintenance, painting, temporary containment, and management and resident education programs. Monitoring, conducted by owners, and reevaluations, conducted by professionals, are integral elements of interim control. Interim controls include dust removal; paint film stabilization; treatment of friction and impact surfaces; installation of soil coverings, such as grass or sod; and land-use controls. See also Monitoring, Reevaluation, and Abatement.

Interior window sill: The portion of the horizontal window ledge that protrudes into the interior of the room, adjacent to the window sash when the window is closed; often called the window stool.

Investigation (pertaining to EBL case): The process of determining the source of lead exposure for a child or other resident with an elevated blood lead level. Investigation consists of administration of a questionnaire, comprehensive environmental sampling, case management, and other measures.





Investigator: A person who conducts an investigation of a dwelling where a resident has an elevated blood lead level. The investigator must be proficient in interviewing techniques, environmental sampling, and the interpretation of risk assessment and environmental sampling data.

Laboratory analysis: A determination of the lead content by atomic absorption spectroscopy, inductively coupled plasma emission spectroscopy, or laboratory-based K or L x-ray fluorescence, or an equivalent method.

Landfill: A State-licensed or State-permitted disposal facility that meets municipal solid waste standards (see Federal regulations at 40 CFR 258).

Landfill liner: A continuous layer of natural or synthetic materials placed beneath and sometimes around a surface impoundment, landfill, or landfill cell. The layer restricts the downward or lateral escape of hazardous waste, hazardous waste constituents, or leachate (40 CFR Part 258).

Latex: A waterborne emulsion paint made with synthetic binders, such as 100-percent acrylic, vinyl acrylic, terpolymer, or styrene acrylic; a stable emulsion of polymers and pigment in water.

Lead: Lead includes metallic lead and inorganic and organic compounds of lead.

Lead-based paint: Any paint, varnish, shellac, or other coating that contains lead equal to or greater than 1.0 mg/cm² as measured by XRF or laboratory analysis, or 0.5 percent by weight $(5,000~\mu\text{g/g},\,5,000~\text{ppm},\,\text{or}\,5,000~\text{mg/kg})$ as measured by laboratory analysis. (Local definitions may vary.)

Lead-based paint hazard: A condition in which exposure to lead from lead-contaminated dust, lead-contaminated soil, or deteriorated lead-based paint would have an adverse effect on human health (as established by the EPA Administrator under Title IV of the Toxic Substances Control Act). Lead-based paint hazards

include for example, deteriorated lead-based paint, leaded dust levels above applicable standards, and bare leaded soil above applicable standards.

Lead-based paint hazard control: Activities to control and eliminate lead-based paint hazards, including interim controls, abatement, and complete abatement.

Lead-based paint abatement planner/designer: An individual who has completed an accredited training program on planning and designing lead-based paint abatement projects.

Lead-based paint abatement worker: See Worker.

Lead carbonate: A pigment used in some leadbased paints as a hiding agent; also known as white lead.

Lead-contaminated dust: Surface dust in residences that contains an area or mass concentration of lead in excess of the standard established by the EPA Administrator, pursuant to Title IV of the Toxic Substances Control Act. Until the EPA standards are set, the HUD-recommended clearance and risk assessment standards for leaded dust are 100 $\mu g/ft^2$ on floors, 500 $\mu g/ft^2$ on interior window sills, and 800 $\mu g/ft^2$ on window troughs. The recommended standard for lead hazard screens for floors is 50 $\mu g/ft^2$ and for window troughs is 400 $\mu g/ft^2$.

Lead-contaminated soil: Bare soil on residential property that contains lead in excess of the standard established by the EPA Administrator, pursuant to Title IV of the Toxic Substances Control Act. The HUD-recommended standard and interim EPA guidance is 400 $\mu g/g$ for high-contact play areas and 2,000 $\mu g/g$ in other bare areas of the yard. Soil contaminated with lead at levels greater than or equal to 5,000 $\mu g/g$ should be abated by removal or paving.

Lead-free dwelling: A lead-free dwelling contains no lead-based paint and has interior dust and exterior soil lead levels below the applicable HUD and EPA standards.





Lead hazard screen: A means of determining whether residences in good condition should have a full risk assessment. Also called a risk assessment screen.

Lead-poisoned child: A child with a single blood lead level that is greater than or equal to 20 μ g/dL or consecutive blood lead levels greater than or equal to 15 μ g/dL. Local definitions may vary.

Lead-specific detergent: A cleaning agent manufactured specifically for cleaning and removing leaded dust or other lead contamination.

Leaded dust: See Lead-contaminated dust.

Leaded zinc: A paint primer made from zinc oxide and lead sulfates.

Licensed: Holding a valid license or certification issued by EPA or by an EPA-approved State program pursuant to Title IV of the Toxic Substances Control Act. The license is based on certification for lead-based paint hazard control work. See also Certified.

Listed waste: A hazardous waste that has been placed on one of three lists developed by EPA: nonspecific source wastes, specific source wastes, and commercial chemical products. The lists were developed by examining different types of waste and chemical products to determine if they exhibited one of the four characteristics of hazardous waste (toxicity, corrosivity, ignitability, or reactivity), met the statutory definition of hazardous waste, were acutely toxic or acutely hazardous, or were otherwise toxic.

Maintenance: Work intended to maintain adequate living conditions in a dwelling, which has the potential to disturb lead-based paint or paint that is suspected of being lead-based.

Manifest: The shipping document (EPA Form 8700–22 or a comparable form required by the State or locality) used for identifying the quantity, composition, origin, routing, and destination of hazardous waste during its transport

from the point of generation to the point of treatment, storage, or disposal. Also, a shipping document used to keep track of items being transported. All hazardous waste must be accompanied by a manifest. See Hazardous waste.

Mat: See Walk-off mat.

Matrix blank: A sample of the matrix (paint chips, soil, or dust) that does not contain the analyte lead. This sample goes through the complete analysis, including digestion.

MDL: See Method detection limit (MDL).

Mean: The arithmetic average of a series of numerical data values; for example, the algebraic sum of the data values divided by the number of data values.

Medical removal: The temporary removal of workers from the job because of the occurrence of elevated blood lead levels as defined in the OSHA Lead Exposure in Construction standard (29 CFR 1926.62).

Method blank: See Digestion blank.

Method detection limit (MDL): The minimum concentration of an analyte that, for a given matrix and method, has a 99-percent probability of being identified, qualitatively or quantitatively measured, and reported to be greater than zero.

mg: Milligram; 1/1,000 of a gram.

Microgram: See µg.

Mil: 1/1,000 of an inch; used to measure thickness.

Milligram: See mg.

Monitoring: Surveillance to determine (1) that known or suspected lead-based paint is not deteriorating, (2) that lead-based paint hazard controls, such as paint stabilization, enclosure, or encapsulation have not failed, (3) that structural problems do not threaten the integrity of hazard controls or of known or suspected





lead-based paint, and (4) that dust lead levels have not risen above applicable standards. There are two types of monitoring activities; visual surveys by property owners and reevaluations by certified risk assessors. Visual surveys are generally conducted annually for the purpose of making the first three determinations listed above. Reevaluations are conducted in accordance with the Standard Reevaluation Schedule (or more frequently, if needed) for the purpose of making all four determinations. Monitoring is not required in properties known to be free of lead-based paint. See also Reevaluation and Standard reevaluation schedule.

Monofil: A State-approved landfill that accepts only construction debris.

Mouthable surface: See Chewed surface.

Multifamily housing: Housing that contains more than one dwelling unit per location.

NLLAP requirements: Requirements, specified by the EPA National Lead Laboratory Accreditation Program (NLLAP), for accreditation for the lead analysis of paint, soil, and dust matrixes by an EPA-recognized laboratory accreditation organization.

Offsite paint removal: The process of removing a component from a building and stripping the paint from the component at an offsite paint-stripping facility.

Ongoing monitoring: See Monitoring.

Owner: A person, firm, corporation, guardian, conservator, receiver, trustee, executor, government agency or entity, or other judicial officer who, alone or with others, owns, holds, or controls the freehold or leasehold title or part of the title to property, with or without actually possessing it. This definition includes a vendee who possesses the title, but does not include a mortgagee or an owner of a reversionary interest under a ground rent lease.

Oxidation: A chemical reaction that occurs upon exposure to oxygen. Some coatings cure by oxidation; oxygen enters the liquid coating and crosslinks (attaches) the resin molecules. This film-forming method is also called "air cure" or "air dry." Oxidation also causes rust to form on metals and paint to chalk.

Paint film stabilization: The process of wet scraping, priming, and repainting surfaces coated with deteriorated lead-based paint; paint film stabilization includes cleanup and clearance.

Paint removal: An abatement strategy that entails the removal of lead-based paint from surfaces. For lead hazard control work, this can mean using chemicals, heat guns below 1,100 °F, and certain *contained* abrasive methods. Open flame burning, open abrasive blasting, sandblasting, water blasting, and extensive dry scraping are prohibited paint removal methods. (Methylene chloride paint removers and dry scraping are also not recommended.)

Patch test: A test method or procedure to assess the adhesion of an encapsulant coating to a substrate covered with a layer or layers of lead-based paint.

Personal breathing zone samples: Air samples collected from the breathing zone of a worker (within a 1-foot radius of the worker's mouth) but outside the respirator. The samples are collected with a personal sampling pump operating at 2 liters per minute, drawing air through a 37 mm mixed cellulose ester filter housed in a closed-face cassette with a pore size of 0.8 microns. See Exposure monitoring.

Personal Protective Equipment (PPE): Equipment for protecting the eyes, face, head, and/or extremities; includes protective clothing, respiratory devices, and protective shields; used when hazards capable of causing bodily injury or impairment are encountered.





PHA: See Public Housing Agency (PHA).

Pigment: Insoluble, finely ground materials that give paint its properties of color and hide.

Pigment Volume Concentration (PVC): Pigment volume as a percentage of the total non-volatile ingredients.

Pilot project: In multifamily housing, the testing of a lead-based paint hazard control strategy on a limited number of dwellings, usually those that are vacant, to determine the feasibility of carrying out such a strategy in the entire multifamily housing development; usually involves paint testing, air sampling, wipe sampling, worksite preparation, and a variety of lead-based paint hazard control treatments.

Plastic: See Polyethylene plastic.

Polyethylene plastic: All references to polyethylene plastic refer to 6-mil plastic sheeting or polyethylene bags (or doubled bags if using 4-mil polyethylene bags), or any other thick plastic material shown to demonstrate at least equivalent performance. Plastic used to contain waste should be capable of completely containing the waste and, after being properly sealed, should remain leak-tight with no visible signs of discharge during movement or relocation.

Polyurethane: An exceptionally hard and wear-resistant coating created by the reaction of polyols with a multifunctional isocyanate; often used to seal wood floors following lead-based paint hazard control work and cleaning.

Precision: The degree to which a set of observations or measurements of the same property, usually obtained under similar conditions, conform to themselves; a data quality indicator. Precision is usually expressed in either absolute or relative terms as standard deviation, variance, or range. Often known as "reproducibility."

Primary prevention: The process of controlling lead hazards to prevent exposure *before* a child is poisoned. See Secondary prevention and Tertiary prevention.

Primary standard: A substance or device with a property or value that is unquestionably accepted, within specified limits, in establishing the value of the same or related property of another substance or device.

Public Housing Agency (PHA): Any State, county, municipality, or other government entity or public body, or agency or instrumentality thereof, authorized to engage or assist in the development or operation of housing for low-income families.

PVC: See Pigment Volume Concentration (PVC).

Quality Assurance (QA): An integrated system of activities involving planning, quality control, quality assessment, reporting, and quality improvement to ensure that a product or service meets defined standards of quality within a stated level of confidence.

Quality Control (QC): The overall system of technical activities whose purpose is to measure and control the quality of a product or service so that it meets the needs of users. The aim is to provide a level of quality that is satisfactory, adequate, dependable, and economical.

Random sample: A sample drawn from a population in a way that allows each member of the population to have an equal chance of being selected. Random sampling is a process used to identify locations for the lead-based paint inspections in multifamily dwellings. See also Targeted sample and Worst-case sample.

RCRA: See Resource Conservation and Recovery Act (RCRA).

Reevaluation: In lead hazard control work, the combination of a visual assessment and collection of environmental samples performed by a certified risk assessor to determine if a previously implemented lead-based paint hazard control measure is still effective and if the dwelling remains lead-safe.





Reference material: A material or substance that has at least one sufficiently well established property that can be used to calibrate an apparatus, assess a measurement method, or assign values to materials.

Reinspection: See Reevaluation.

Removal: See Paint removal.

Renovation: Work that involves construction and/or home or building improvement measures such as window replacement, weatherization, remodeling, and repainting.

Replacement: A strategy of abatement that entails the removal of building components coated with lead-based paint (such as windows, doors, and trim) and the installation of new components free of lead-based paint.

Representative sample: A sample of a universe or whole (e.g., waste sample pile, lagoon, groundwater, or waste stream) that can be expected to exhibit the average properties of the entire universe or whole.

Resident: A person who lives in a dwelling.

Resource Conservation and Recovery Act (RCRA): The primary Federal statute governing waste management from generation to disposal. RCRA defines the criteria for hazardous and nonhazardous waste.

Risk assessment: An onsite investigation of a residential dwelling to discover any lead-based paint hazards. Risk assessments include an investigation of the age, history, management, and maintenance of the dwelling, and the number of children under age 6 and women of childbearing age who are residents; a visual assessment; limited environmental sampling (i.e., collection of dust wipe samples, soil samples, and deteriorated paint samples); and preparation of a report identifying acceptable abatement and interim control strategies based on specific conditions.

Risk assessment screen: A type of risk assessment performed only in buildings in good condition using fewer samples but more stringent evaluation criteria (standards) to determine lead hazards.

Risk assessor: A certified individual who has completed training with an accredited training program and who has been certified to (1) perform risk assessments, (2) identify acceptable abatement and interim control strategies for reducing identified lead-based paint hazards, (3) perform clearance testing and reevaluations, and (4) document the successful completion of lead-based paint hazard control activities.

Sample site: A specific spot on a surface being tested for lead concentration.

Saponification: The chemical reaction between alkalies and oil that produces a type of soap. Because of saponification, oil and alkyd coatings will not adhere to masonry substrates, galvanized metals, or zinc-rich primers. Also a form of incompatibility between types of coatings.

Screen: See Risk assessment screen or Lead hazard screen.

Screening: The process of testing children to determine if they have elevated blood lead levels.

Secondary prevention: The process of identifying children who have elevated blood lead levels through screening and controlling or eliminating the sources of further exposure. See also Primary prevention and Tertiary prevention.

SEL: See Substrate Equivalent Lead (SEL).

Site: The land or body of water where a facility is located or an activity is conducted. The site includes adjacent land used in connection with the facility or activity.





Small-quantity generator: Owners, contractors (generators), or both who produce less than 100 kg of hazardous waste per month and accumulate less than 100 kg of hazardous waste at any one time, or who produce less than 1 kg of acutely hazardous waste per month and accumulate less than 1 kg of acutely hazardous waste at any one time.

Soil: See Bare soil.

Solid waste: As defined by RCRA, the term solid waste means garbage; refuse; sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility; or other discarded materials, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations or from community activities. The term does not include solid or dissolved material in domestic sewage or solid or dissolved material in irrigation return flows or industrial discharges (which are point sources subject to permits under the Clean Water Act), nor does the term include special nuclear or byproduct material as defined by the Atomic Energy Act of 1954.

Spectrum analyzer: A type of XRF analyzer that provides the operator with a plot of the energy and intensity, or counts of both K and L x-ray spectra, as well as a calculated lead concentration. See also XRF analyzer.

Spiked matrix: See Spiked sample.

Spiked sample: A sample prepared by adding a known mass of the target analyte (e.g., leaded dust) to a specific amount of matrix sample (e.g., one dust wipe) for which an independent estimate of the target analyte concentration is available. Spiked samples are used to determine, for example, the effect of the matrix on a method's recovery efficiency. See also Blind sample.

Spot-prime: To apply a paint primer to localized areas of exposed substrate.

Standard deviation: A measure of the precision of a reading; the spread of the deviation from the mean. The smaller the standard deviation, the more precise the analysis. The standard deviation is calculated by first obtaining the mean, or the arithmetic average, of all of the readings. A formula is then used to calculate how much the individual values vary from the mean—the standard deviation is the square root of the arithmetic average of the squares of the deviation from the mean. Many hand calculators have an automatic standard deviation function. See also Mean.

Standard reevaluation schedule (SRS): A schedule that determines the frequency that reevaluations should be performed on a property.

Standard reference material (SRM): A certified reference material produced by the National Institute of Standards and Technology (U.S. Department of Commerce) and characterized for absolute content independent of analytical method. See also Certified reference material.

Subsample: A representative portion of a sample. A subsample may be either a field sample or a laboratory sample. A subsample is often combined with other subsamples to produce a composite sample. See also Composite sample.

Substrate: A surface on which paint, varnish, or other coating has been applied or may be applied. Examples of substrates include wood, plaster, metal, and drywall.

Substrate effect: The radiation returned to an XRF analyzer by the paint, substrate, or underlying material, in addition to the radiation returned by any lead present. This radiation, when counted as lead x-rays by an XRF analyzer contributes to substrate equivalent lead (bias). The inspector may have to compensate for this effect when using XRF analyzers. See also XRF analyzer.





Substrate Equivalent Lead (SEL): The XRF measurement taken on an unpainted surface; used to calculate the corrected lead concentration on a surface by using the following formula: Apparent Lead Concentration—Substrate Equivalent Lead = Corrected Lead Concentration. See also Apparent Lead Concentration (ALC), Corrected Lead Concentration (CLC), and XRF analyzer.

Target housing: Any residential unit constructed before 1978, except dwellings that do not contain bedrooms or dwellings that were developed specifically for the elderly or persons with disabilities—unless a child younger than 6 resides or is expected to reside in the dwelling. In the case of jurisdictions that banned the sale or use of lead-based paint before 1978, the Secretary of HUD may designate an earlier date for defining target housing.

Targeted sample: A sample of dwelling units selected from an apartment building or housing development using information supplied by the owner. The units selected are likely to have the greatest probability of containing lead-based paint hazards. A targeted sample is usually selected for performing risk assessments in multifamily housing when it is not possible to select a worst-case sample. See also Worst-case sample and Random sample.

TCLP: See Toxicity Characteristic Leaching Procedure (TCLP).

Tertiary prevention: Providing medical treatment to children with elevated blood lead levels to prevent more serious injury or death.

Testing combination: A unique surface to be tested that is characterized by the room equivalent, component, substrate, and visible color.

Test location: A specific area on a testing combination where XRF instruments will test for lead-based paint.

Toxicity Characteristic Leaching Procedure (TCLP): A laboratory test to determine if excessive levels of lead or other hazardous materials could leach from a sample into groundwater; usually used to determine if waste is hazardous based on its toxicity characteristics.

Trained: Successful completion of a training course in a particular discipline. For lead hazard control work, the training course must be accredited by EPA or by an EPA-approved State program, pursuant to Title IV of the Toxic Substances Control Act.

Transporter: A person who transports hazardous waste, requiring a manifest under 40 CFR Part 260.10, within the United States by air, rail, highway, or water.

Treatment: In residential lead-based paint hazard control work, any method designed to control lead-based paint hazards. Treatment includes interim controls, abatement, and removal. Hazardous waste "treatment" is a method, technique, or process (such as neutralization) that is designed to change the physical, chemical, or biological character or composition of hazardous waste to neutralize it; render it nonhazardous or less hazardous; recover it; make it safer to transport, store, or dispose; or allow for easier recovery, storage, or volume reduction.

Treatment, Storage, and Disposal (TSD) facility: A facility licensed to handle hazardous waste.

Trisodium phosphate (TSP) detergent: A detergent that contains trisodium phosphate.

Trough: See Window trough.

Truck-mounted vacuum unit: A vacuum system whose components, except for hoses and attachments, are located outside the building undergoing dust removal. The exhaust is vented outside so that the interior dust is not disturbed.

TSD: See Treatment, Storage, and Disposal (TSD) facility.

TSP: See Trisodium phosphate (TSP) detergent.

 μ g (or ug): Micrograms. The prefix micromeans 1/1,000,000 (or one-millionth); a microgram is 1/1,000,000 of a gram and 1/1,000 of a milligram; equal to about 35/1,000,000,000 (35 billionths) of an ounce (an ounce is equal to 28,400,000 μ g).





Urethane-modified alkyd: An alkyd molecule that has been chemically modified by the incorporation of a urethane; a coating, often a varnish, that uses a urethane-modified alkyd resin in the binder.

Useful life: The life expectancy of a coating before it requires refinishing or some other form of maintenance.

VOC: See Volatile Organic Compound (VOC).

Volatile Organic Compound (VOC): Substances that vaporize or evaporate from a coating during the coating or curing process.

Walk-off mat: A washable, fibrous material (preferably with a rubber or vinyl backing) positioned at main entryways to reduce transport of lead dust and lead soil into a building or residence.

White lead: A white pigment, usually lead carbonate. See also Lead carbonate.

Window sill: See Interior window sill.

Window stool: See Interior window sill.

Window trough: For a typical double-hung window, the portion of the exterior window sill between the interior window sill (or stool) and the frame of the storm window. If there is no storm window, the window trough is the area that receives both the upper and lower window sashes when they are both lowered. Sometimes inaccurately called the window "well." See also Window well.

Window well: The space that provides exterior access and/or light to a window that is below grade, i.e., below the level of the surrounding earth or pavement. See also Window trough.

Worker: An individual who has completed training in an accredited program to perform lead-based paint hazard control in housing.

Worksite: Any interior or exterior area where lead-based paint hazard control work takes place.

Worksite preparation level: A set of measures designed to protect residents and the environment from leaded dust, paint chips, or other forms of lead contamination through the erection of barriers and the establishment of access control, resident relocation or movement restrictions, warning signs, ventilation, and other measures.

Worst-case sample: A sample of dwelling units having the greatest probability of containing lead-based paint hazards selected by a risk assessor on the basis of a visual examination of all dwelling units in a housing development or apartment building. See also Targeted sample and Random sample.

XRF analyzer: An instrument that determines lead concentration in milligrams per square centimeter (mg/cm²) using the principle of x-ray fluorescence (XRF). Two types of XRF analyzers are used—direct readers and spectrum analyzers. In these *Guidelines*, the term XRF analyzer only refers to portable instruments manufactured to analyze paint, and does not refer to laboratory-grade units or portable instruments designed to analyze soil.

Appendix 4

Inspector Certification

Appendix 5

CDPH 8552 Inspection Form



STATE OF CALIFORNIA DEPARTMENT OF PUBLIC HEALTH



LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:

CERTIFICATE TYPE:

NUMBER:

EXPIRATION DATE:

Lead Inspector/Assessor

LRC-00000459

5/31/2025

Lead Project Monitor

LRC-00000458

5/31/2025

Michelle Ehresman

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD

LEAD HAZARD EVALUATION REPORT

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Second copy and attachments retained by owner

California Department of Public Health
Childhood Lead Poisoning Prevention Branch Reports
850 Marina Bay Parkway, Building P, Third Floor
Richmond, CA 94804-6403
Fax: (510) 620-5656

Appendix 6

Renovate Right



AUTION CAUTION

CAUTION

CAUTION

CAUTION







1-800-424-LEAD (5323) www.epa.gov/getleadsafe EPA-740-K-10-001 April 2010



Important lead hazard information for families, child care providers and schools.





IT'S THE LAW!

Federal law requires contractors that disturb painted surfaces in homes, child care facilities and schools, built before 1978 to be certified and follow specific work practices to prevent lead contamination. Always ask to see your contractor's certification.

Federal law requires that individuals receive certain information before renovating more than six square feet of painted surfaces in a room for interior projects or more than twenty square feet of painted surfaces for exterior projects or window replacement or demolition in housing, child care facilities and schools built before 1978.

- Homeowners and tenants: renovators must give you this pamphlet before starting work.
- Child care facilities, including preschools and kindergarten classrooms, and the families of children under six years of age that attend those facilities: renovators must provide a copy of this pamphlet to child care facilities and general renovation information to families whose children attend those facilities.



WHO SHOULD READ THIS PAMPHLET?

This pamphlet is for you if you:

- Reside in a home built before 1978.
- Own or operate a child care facility, including preschools and kindergarten classrooms, built before 1978, or
- Have a child under six years of age who attends a child care facility built before 1978.

You will learn:

- Basic facts about lead and your health.
- How to choose a contractor, if you are a property owner.
- What tenants, and parents/guardians of a child in a child care facility or school should consider.
- How to prepare for the renovation or repair job.
- What to look for during the job and after the job is done.
- Where to get more information about lead.

This pamphlet is not for:

- Abatement projects. Abatement is a set of activities aimed specifically at
 eliminating lead or lead hazards. EPA has regulations for certification and training of
 abatement professionals. If your goal is to eliminate lead or lead hazards, contact the
 National Lead Information Center at 1-800-424-LEAD (5323) for more information.
- "Do-it-yourself" projects. If you plan to do renovation work yourself, this document is a good start, but you will need more information to complete the work safely. Call the National Lead Information Center at 1-800-424-LEAD (5323) and ask for more information on how to work safely

in a home with lead-based paint.

Contractor education. Contractors
 who want information about working
 safely with lead should contact
 the National Lead Information
 Center at 1-800-424-LEAD (5323)
 for information about courses and
 resources on lead-safe work practices.



RENOVATING, REPAIRING, OR PAINTING?



- Is your home, your building, or the child care facility or school your children attend being renovated, repaired, or painted?
- Was your home, your building, or the child care facility or school where your children under six years of age attend built before 1978?

If the answer to these questions is YES, there are a few important things you need to know about lead-based paint.

This pamphlet provides basic facts about lead and information about lead safety when work is being done in your home, your building or the child care facility or school your children attend.

The Facts About Lead

- Lead can affect children's brains and developing nervous systems, causing reduced IQ, learning disabilities, and behavioral problems. Lead is also harmful to adults.
- Lead in dust is the most common way people are exposed to lead. People can also get lead in their bodies from lead in soil or paint chips. Lead dust is often invisible.
- Lead-based paint was used in more than 38 million homes until it was banned for residential use in 1978.
- Projects that disturb painted surfaces can create dust and endanger you and your family. Don't let this happen to you. Follow the practices described in this pamphlet to protect you and your family.

LEAD AND YOUR HEALTH

Lead is especially dangerous to children under six years of age.

Lead can affect children's brains and developing nervous systems, causing:

- Reduced IQ and learning disabilities.
- · Behavior problems.

Even children who appear healthy can have dangerous levels of lead in their bodies.

Lead is also harmful to adults. In adults, low levels of lead can pose many dangers, including:

- High blood pressure and hypertension.
- Pregnant women exposed to lead can transfer lead to their fetuses. Lead gets into the body when it is swallowed or inhaled.
- People, especially children, can swallow lead dust as they eat, play, and do other normal hand-to-mouth activities.
- People may also breathe in lead dust or fumes if they disturb lead-based paint.
 People who sand, scrape, burn, brush or blast or otherwise disturb lead-based paint risk unsafe exposure to lead.

What should I do if I am concerned about my family's exposure to lead?

- Call your local health department for advice on reducing and eliminating exposures to lead inside and outside your home, child care facility or school.
- Always use lead-safe work practices when renovation or repair will disturb painted surfaces.
- A blood test is the only way to find out if you or a family member already has lead poisoning. Call your doctor or local health department to arrange for a blood test.

For more information about the health effects of exposure to lead, visit the EPA lead website at www.epa.gov/lead/pubs/leadinfo.htm or call 1-800-424-LEAD (5323).

There are other things you can do to protect your family every day.

- Regularly clean floors, window sills, and other surfaces.
- Wash children's hands, bottles, pacifiers, and toys often.
- Make sure children eat a healthy, nutritious diet consistent with the USDA's dietary guidelines, that helps protect children from the effects of lead.
- Wipe off shoes before entering house.



WHERE DOES THE LEAD COME FROM?

Dust is the main problem.

The most common way to get lead in the body is from dust. Lead dust comes from deteriorating lead-based paint and lead-contaminated soil that gets tracked into your home. This dust may accumulate to unsafe levels. Then, normal hand to-mouth activities, like playing and eating (especially in young children), move that dust from surfaces like floors and window sills into the body.

Home renovation creates dust.

Common renovation activities like sanding, cutting, and demolition can create hazardous lead dust and chips.

Proper work practices protect you from the dust.

The key to protecting yourself and your family during a renovation, repair or painting job is to use lead-safe work practices such as containing dust inside the work area, using dust-minimizing work methods, and conducting a careful cleanup, as described in this pamphlet.

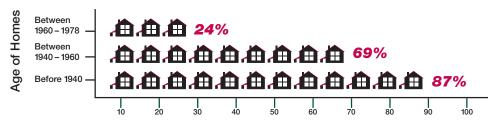
Other sources of lead.

Remember, lead can also come from outside soil, your water, or household items (such as lead-glazed pottery and lead crystal). Contact the National Lead Information Center at 1-800-424-LEAD (5323) for more information on these sources.



CHECKING YOUR HOME FOR LEAD-BASED PAINT

Percentage of Homes Likely to Contain Lead



Older homes, child care facilities, and schools are more likely to contain lead-based paint.

Homes may be single-family homes or apartments. They may be private, government-assisted, or public housing. Schools are preschools and kindergarten classrooms. They may be urban, suburban, or rural.

You have the following options:

You may decide to assume your home, child care facility, or school contains lead. Especially in older homes and buildings, you may simply want to assume lead-based paint is present and follow the lead-safe work practices described in this brochure during the renovation, repair, or painting job.

You can hire a certified professional to check for lead-based paint.

These professionals are certified risk assessors or inspectors, and can determine if your home has lead or lead hazards.

- A certified inspector or risk assessor can conduct an inspection telling you whether your home, or a portion of your home, has lead-based paint and where it is located. This will tell you the areas in your home where lead-safe work practices are needed.
- A certified risk assessor can conduct a risk assessment telling you if your home currently has any lead hazards from lead in paint, dust, or soil. The risk assessor can also tell you what actions to take to address any hazards.
- For help finding a certified risk assessor or inspector, call the National Lead Information Center at 1-800-424-LEAD (5323).

You may also have a certified renovator test the surfaces or components being disturbed for lead using a lead test kit. Test kits must be EPA-recognized and are available at hardware stores. They include detailed instructions for their use.

FOR PROPERTY OWNERS

You have the ultimate responsibility for the safety of your family, tenants, or children in your care.

This means properly preparing for the renovation and keeping persons out of the work area (see p. 8). It also means ensuring the contractor uses lead-safe work practices.

Federal law requires that contractors performing renovation, repair and painting projects that disturb painted surfaces in homes, child care facilities, and schools built before 1978 be certified and follow specific work practices to prevent lead contamination.

Make sure your contractor is certified, and can explain clearly the details of the job and how the contractor will minimize lead hazards during the work.

- You can verify that a contractor is certified by checking EPA's website at epa.gov/getleadsafe or by calling the National Lead Information Center at 1-800-424-LEAD (5323). You can also ask to see a copy of the contractor's firm certification.
- Ask if the contractor is trained to perform lead-safe work practices and to see a copy of their training certificate.
- Ask them what lead-safe methods they will use to set up and perform the job in your home, child care facility or school.
- Ask for references from at least three recent jobs involving homes built before 1978, and speak to each personally.

Always make sure the contract is clear about how the work will be set up, performed, and cleaned.

- Share the results of any previous lead tests with the contractor.
- You should specify in the contract that they follow the work practices described on pages 9 and 10 of this brochure.
- The contract should specify which parts of your home are part of the work area and specify which lead-safe work practices will be used in those areas. Remember, your contractor should confine dust and debris to the work area and should minimize spreading that dust to other areas of the home.
- The contract should also specify that the contractor will clean the work area, verify that it was cleaned adequately, and re-clean it if necessary.

If you think a worker is not doing what he is supposed to do or is doing something that is unsafe, you should:

- Direct the contractor to comply with regulatory and contract requirements.
- Call your local health or building department, or
- Call EPA's hotline 1-800-424-LEAD (5323).

If your property receives housing assistance from HUD (or a state or local agency that uses HUD funds), you must follow the requirements of HUD's Lead-Safe Housing Rule and the ones described in this pamphlet.

FOR TENANTS AND FAMILIES OF CHILDREN UNDER SIX YEARS OF AGE IN CHILD CARE FACILITIES AND SCHOOLS

You play an important role ensuring the ultimate safety of your family.

This means properly preparing for the renovation and staying out of the work area (see p. 8).

Federal law requires that contractors performing renovation, repair and painting projects that disturb painted surfaces in homes built before 1978 and in child care facilities and schools built before 1978, that a child under six years of age visits regularly, to be certified and follow specific work practices to prevent lead contamination.

The law requires anyone hired to renovate, repair, or do painting preparation work on a property built before

1978 to follow the steps described on pages 9 and 10 unless the area where the work will be done contains no lead-based paint.

If you think a worker is not doing what he is supposed to do or is doing something that is unsafe, you should:

- · Contact your landlord.
- · Call your local health or building department, or
- Call EPA's hotline 1-800-424-LEAD (5323).

If you are concerned about lead hazards left behind after the job is over, you can check the work yourself (see page 10).



7

PREPARING FOR A RENOVATION

The work areas should not be accessible to occupants while the work occurs.

The rooms or areas where work is being done may need to be blocked off or sealed with plastic sheeting to contain any dust that is generated. Therefore, the contained area may not be available to you until the work in that room or area is complete, cleaned thoroughly, and the containment has been removed. Because you may not have access to some areas during the renovation, you should plan accordingly.

You may need:

- Alternative bedroom, bathroom, and kitchen arrangements if work is occurring in those areas of your home.
- A safe place for pets because they too can be poisoned by lead and can track lead dust into other areas of the home.
- A separate pathway for the contractor from the work area to the outside in order to bring materials in and out of the home. Ideally, it should not be through the same entrance that your family uses.
- A place to store your furniture. All furniture and belongings may have to be moved from the work area while the work is being done. Items that can't be moved, such as cabinets, should be wrapped in plastic.
- To turn off forced-air heating and air conditioning systems while the work is being done. This prevents dust from spreading through vents from the work area to the rest of your home. Consider how this may affect your living arrangements.

You may even want to move out of your home temporarily while all or part of the work is being done.

Child care facilities and schools may want to consider alternative accommodations for children and access to necessary facilities.



DURING THE WORK

Federal law requires contractors that are hired to perform renovation, repair and painting projects in homes, child care facilities, and schools built before 1978 that disturb painted surfaces to be certified and follow specific work practices to prevent lead contamination.

The work practices the contractor must follow include these three simple procedures, described below:

- 1. Contain the work area. The area must be contained so that dust and debris do not escape from that area. Warning signs must be put up and plastic or other impermeable material and tape must be used as appropriate to:
 - Cover the floors and any furniture that cannot be moved.
 - Seal off doors and heating and cooling system vents.

These will help prevent dust or debris from getting outside the work area.

2. Avoid renovation methods that generate large amounts of lead-contaminated dust.

Some methods generate so much lead-contaminated dust that their use is prohibited.

They are:

- · Open flame burning or torching.
- Sanding, grinding, planing, needle gunning, or blasting with power tools and equipment not equipped with a shroud and HEPA vacuum attachment.
- Using a heat gun at temperatures greater than 1100°F.

There is no way to eliminate dust, but some renovation methods make less dust than others. Contractors may choose to use various methods to minimize dust generation, including using water to mist areas before sanding or scraping; scoring paint before separating components; and prying and pulling apart components instead of breaking them.

- **3. Clean up thoroughly.** The work area should be cleaned up daily to keep it as clean as possible. When all the work is done, the area must be cleaned up using special cleaning methods before taking down any plastic that isolates the work area from the rest of the home. The special cleaning methods should include:
 - Using a HEPA vacuum to clean up dust and debris on all surfaces, followed by
 - Wet wiping and wet mopping with plenty of rinse water.

When the final cleaning is done, look around. There should be no dust, paint chips, or debris in the work area. If you see any dust, paint chips, or debris, the area must be re-cleaned.

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FOR PROPERTY OWNERS: AFTER THE WORK IS DONE

When all the work is finished, you will want to know if your home, child care facility, or school has been cleaned up properly. Here are some ways to check.

Ask about your contractor's final cleanup check. Remember, lead dust is often invisible to the naked eye. It may still be present even if you cannot see it. The contractor must use disposable cleaning cloths to wipe the floor of the work area and compare them to a cleaning verification card to determine if the work area was adequately cleaned.

To order a cleaning verification card and detailed instructions visit the EPA lead website at www.epa.gov/lead or contact the National Lead Information Center at 1-800-424-LEAD (5323) or visit their website at www.epa.gov/lead/nlic.htm.

You also may choose to have a lead-dust test. Lead-dust tests are wipe samples sent to a laboratory for analysis.

- You should specify in your contract that a lead-dust test will be done. In this case, make it clear who will do the testing.
- Testing should be done by a lead professional.

If you choose to do the testing, some EPA-recognized lead laboratories will send you a kit that allows you to collect samples and send them back to the lab for analysis.

Contact the National Lead Information Center at 1-800-424-LEAD (5323) for lists of qualified professionals and EPA-recognized lead labs.

If your home, child care facility, or school fails the dust test, the area should be re-cleaned and tested again.

Where the project is done by contract, it is a good idea to specify in the contract that the contractor is responsible for re-cleaning if the home, child care facility, or school fails the test.



FOR ADDITIONAL INFORMATION

You may need additional information on how to protect yourself and your children while a job is going on in your home, your building, or child care facility.

The National Lead Information Center at 1-800-424-LEAD (5323) or www.epa.gov/lead/nlic.htm can tell you how to contact your state, local, and/or tribal programs or get general information about lead poisoning prevention.

- State and tribal lead poisoning prevention or environmental protection programs can provide information about lead regulations
- and potential sources of financial aid for reducing lead hazards. If your state or local government has requirements more stringent than those described in this pamphlet, you must follow those requirements.
- Local building code officials can tell you the regulations that apply to the renovation work that you are planning.
- State, county, and local health departments can provide information about local programs, including assistance for lead-poisoned children and advice on ways to get your home checked for lead.

The National Lead Information Center can also provide a variety of resource materials, including the following guides to lead-safe work practices. Many of these materials are also available at www.epa.gov/lead/pubs/brochure.htm.

- Steps to Lead Safe Renovation, Repair and Painting.
- Protect Your Family from Lead in Your Home
- Lead in Your Home: A Parent's Reference Guide





For the hearing impaired, call the Federal Information Relay Service at 1-800-877-8339 to access any of the phone numbers in this brochure.

10 11

OTHER FEDERAL AGENCIES

EPA Regional Offices

EPA addresses residential lead hazards through several different regulations. EPA requires training and certification for conducting abatement and renovations, education about hazards associated with renovations, disclosure about known lead paint and lead hazards in housing, and sets lead-paint hazard standards.

Your Regional EPA Office can provide further information regarding lead safety and lead protection programs at **epa.gov/lead**.

Region 1

(Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island, Vermont) Regional Lead Contact U.S. EPA Region 1 Suite 1100 One Congress Street Boston, MA 02114-2023 (888) 372-7341

Region 2

(New Jersey, New York, Puerto Rico, Virgin Islands) Regional Lead Contact U.S. EPA Region 2 2890 Woodbridge Avenue Building 205, Mail Stop 225 Edison, NJ 08837-3679 (732) 321-6671

Region 3

(Delaware, Maryland, Pennsylvania, Virginia, Washington, DC, West Virginia) Regional Lead Contact U.S. EPA Region 3 1650 Arch Street Philadelphia, PA 19103-2029 (215) 814-5000

Region 4

(Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee) Regional Lead Contact U.S. EPA Region 4 61 Forsyth Street, SW Atlanta, GA 30303-8960 (404) 562-9900

Region 5

(Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin) Regional Lead Contact U.S. EPA Region 5 77 West Jackson Boulevard Chicago, IL 60604-3507 (312) 886-6003

Region 6

(Arkansas, Louisiana, New Mexico, Oklahoma, Texas) Regional Lead Contact U.S. EPA Region 6 1445 Ross Avenue, 12th Floor Dallas, TX 75202-2733 (214) 665-6444

Region 7

(Iowa, Kansas, Missouri, Nebraska) Regional Lead Contact U.S. EPA Region 7 901 N. 5th Street Kansas City, KS 66101 (913) 551-7003

Region 8

(Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming) Regional Lead Contact U.S. EPA Region 8 1595 Wynkoop Street Denver, CO 80202 (303) 312-6312

Region 9

(Arizona, California, Hawaii, Nevada) Regional Lead Contact U.S. Region 9 75 Hawthorne Street San Francisco, CA 94105 (415) 947-8021

Region 10

(Alaska, Idaho, Oregon, Washington) Regional Lead Contact U.S. EPA Region 10 1200 Sixth Avenue Seattle, WA 98101-1128 (206) 553-1200

CPSC

The Consumer Product Safety
Commission (CPSC) protects the public
from the unreasonable risk of injury or
death from 15,000 types of consumer
products under the agency's jurisdiction.
CPSC warns the public and private
sectors to reduce exposure to lead and
increase consumer awareness. Contact
CPSC for further information regarding
regulations and consumer product safety.

CPSC

4330 East West Highway Bethesda, MD 20814 Hotline 1-(800) 638-2772 www.cpsc.gov

CDC Childhood Lead Poisoning Prevention Branch

The Centers for Disease Control and Prevention (CDC) assists state and local childhood lead poisoning prevention programs to provide a scientific basis for policy decisions, and to ensure that health issues are addressed in decisions about housing and the environment. Contact CDC Childhood Lead Poisoning Prevention Program for additional materials and links on the topic of lead.

CDC Childhood Lead Poisoning Prevention Branch

4770 Buford Highway, MS F-40 Atlanta, GA 30341 (770) 488-3300 www.cdc.gov/nceh/lead

HUD Office of Healthy Homes and Lead Hazard Control

The Department of Housing and Urban Development (HUD) provides funds to state and local governments to develop cost-effective ways to reduce lead-based paint hazards in America's privately-owned low-income housing. In addition, the office enforces the rule on disclosure of known lead paint and lead hazards in housing, and HUD's lead safety regulations in HUD-assisted housing, provides public outreach and technical assistance, and conducts technical studies to help protect children and their families from health and safety hazards in the home. Contact the HUD Office of Healthy Homes and Lead Hazard Control for information on lead regulations, outreach efforts, and lead hazard control research and outreach grant programs.

U.S. Department of Housing and Urban Development

Office of Healthy Homes and Lead Hazard Control 451 Seventh Street, SW, Room 8236 Washington, DC 20410-3000 HUD's Lead Regulations Hotline (202) 402-7698 www.hud.gov/offices/lead/

12 13



SAMPLE PRE-RENOVATION FORM

This sample form may be used by renovation firms to document compliance with the Federal pre-renovation education and renovation, repair, and painting regulations.

Occupant Confirmation Pamphlet Receipt

□ I have received a copy of the lead hazard info potential risk of the lead hazard exposure fro dwelling unit. I received this pamphlet befor	om renovation activity to be performed in my
Printed Name of Owner-occupant	
Signature of Owner-occupant	Signature Date
Renovator's Self Certification Option (for tend Instructions to Renovator: If the lead hazard int signature was not obtainable, you may check t	formation pamphlet was delivered but a tenant
pamphlet to the rental dwelling unit listed b	faith effort to deliver the lead hazard information elow at the date and time indicated and that the of receipt. I further certify that I have left a copy nt.
was unavailable to sign the confirmation of r	ave made a good faith effort to deliver the lead lwelling unit listed below and that the occupant receipt. I further certify that I have left a copy of the door or by (fill in how pamphlet was left).
Printed Name of Person Certifying Delivery	Attempted Delivery Date
Signature of Person Certifying Lead Pamphlet	Delivery
Unit Address	

Note Regarding Mailing Option — As an alternative to delivery in person, you may mail the lead hazard information pamphlet to the owner and/or tenant. Pamphlet must be mailed at least seven days before renovation. Mailing must be documented by a certificate of mailing from the post office.

CLIENT COMPREHESIVE ASBESTOS SURVEY REPORT FOR DEMOLITION

PROJECT NAME:

ORANGE COUNTY JUVENILE HALL- BUILDING 4

PROJECT ADDRESS:

331 The City Drive, S. Orange, California 92868

Prepared for:

Mr. Scott L. Battles Vanir Construction Management, Inc 4540 Duckhorn Drive, Suite 300 Sacramento, California 95834

MIG

Prepared by:

MTGL, Inc. 7742 Arjons Dr. San Diego, California 92126 858-537-3999

Project Number:

SDPE-24-061.1CT

Report By:

Michelle Ehresman, CAC
CAC Certification Number: 14-5323

CAC Expiration Date: November 19, 20204

Date of Report:

April 22, 2024

Version 1.0

TABLE OF CONTENTS

INTRODUCTIONSection 1
General Information
Project Information
Site/Building Description
Suspect Materials Observed
INVESTIGATION LIMITATIONS & WARRANTYSection 2
ASBESTOS SURVEY METHODOLOGYSection 3
General References
Visual Inspection
Homogeneous Material Classifications
Sampling Procedures
Laboratory Procedures
Method of Analysis
Laboratory Quality Control Program
ASBESTOS SURVEY OBSERVATIONS AND FINDINGS Section 4
Summary
Table 1: Positively Identified Materials that Contain Asbestos (ACM and ACCM) and
Assessment of Material Condition.
Table 2: Materials found to be Negative for Asbestos
General Information
Environmental Protection Agency (EPA)
California Occupational Safety & Health Agency (Cal/OSHA)
National Emission Standards for Hazardous Air Pollutants (NESHAP)
CONCLUSIONS & RECOMMENDATIONS Section 5
APPENDICES Section 6
Appendix 1 – Asbestos Laboratory Results & Chain of Custodies
Appendix 2 – Site Map with Sample Location
Appendix 3 – Photo Documentation
Appendix 4 – Inspector Certifications

SECTION 1 INTRODUCTION

GENERAL INFORMATION

MTGL, Inc. was retained to conduct a survey for suspect asbestos containing materials. The intent of this survey is to pre-determine the presence of EPA/OSHA regulated Asbestos Containing Materials and Asbestos Containing Construction Materials (ACCM) that may need to be addressed prior to scheduled demolition and/or renovation activities.

MTGL's scope of work was limited to the following:

- Review of project drawings.
- Conduct a pre-construction asbestos inspection limited to Client specified locations in accordance with NESHAP Regulations and the collection of bulk samples of suspect ACM.
- Submit samples to a NVLAP accredited laboratory for analysis of asbestos fiber content using polarized-light microscopy.
- Prepare report with material description, sampling locations, analytical results, and recommendations for proper handling/abatement prior to demolition and/or renovation activities.

PROJECT INFORMATION

Survey Requested/Authorized By: Mr. Scott L. Battles

Type of Survey Requested: Limited (Restricted to Client Specified Locations Only)

Destructive Sampling Allowed by Client: Yes

Project Name: ORANGE COUNTY JUVENILE HALL BUILDING 1

Project Address: 331 The City of Orange Dr. S in the city of Orange in the State of California.

Date of Inspection: March 28, 2024 to March 28, 2024

AHERA Certified Building Inspector Name: Darla Beery

AHERA Certified Building Inspector Number: 2023ABCA171101

Additional AHERA Certified Building Inspector Name: Michelle Ehresman

Additional AHERA Certified Building Inspector Number: ABIR0727230010N35227

Local Air District: South Coast Air Quality Management District (Sampling method, lab

qualifications, lab analytical procedures, and lab method of analysis were performed in compliance with Rule 1403 (d)(1)(A) and 40 CFR Part 763 -

Asbestos. requirments)

Laboratory: EMLab P&K, LLC – ID#: 3593696

9445 Farnham St, Suite 103, San Diego, CA 92123

(866) 888-6653 Fax (623) 780-7695 www.emlab.com

Laboratory Sample Analysis Method: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA

METHOD 600/R-93-116, SOP EM-AS-S-1267)

Sampling Protocols: EPA 40CFR 763.86 Methods

SITE/BUILDING DESCRIPTION

Structure Type: Commercial Facility

Year Built: Unknown

Date of known additions: Unknown

Building Structural Damage (If Any): None Observed

Approximate Square Feet of Surveyed Area: 10,000

Structure Frame: Wood

If other, describe: None

Structure Foundation: Wood (Elevated)

If other, describe: None

Number of Floors: 1

Building Occupied: Yes

SUSPECT MATERIALS OBSERVED

Suspect Materials Observed During the Asbestos Survey Conducted

- Grey Sheet Vinyl
- 2'x2' Dotted Ceiling tile
- Structural Fireproofing
- HVAC Insulation
- Finished Drywall
- Cove Base Glue
- Pipe Insulation
- HVAC Seam Caulk
- Carpet Glue
- FSB Board
- Expansion Caulking
- Concrete Sidewalk and Asphalt
- Exterior Concrete Block and Textured Coating (Soffit)

Inaccessible Materials Presumed to be Asbestos Content:

• Roofing Materials

SECTION 2 INVESTIGATION LIMITATIONS & WARRANTY

Per the agreement between The Client and MTGL, Inc., the scope of services was performed as described in this report.

The intent of this survey is to pre-determine the presence of EPA/OSHA regulated asbestos containing building materials that may need to be addressed prior to scheduled demolition and/or renovation activities.

INVESTIGATION LIMITATIONS

MTGL, Inc. did not conduct testing within interstitial wall cavities, ceiling plenums, HVAC ventilation systems or crawlspaces or other locations of the facility, outside of the Client specified areas.

The findings of this report are valid as of the date of the survey and sample collection. Changes in the condition of the property can occur with passage of time, whether they are due to natural processes or the works of man on this or adjacent properties. In addition, changes in the state-of-art technology and/or government codes may occur. Due to such changes, the findings of this report may be invalidated wholly or in part by conditions beyond our control. Due to changes that can occur over time, submittals of this report to Regulatory Agencies may require additional site visits and assessment to document current conditions.

The final assessment of the potential for the existence of hazardous contaminants at the site should be considered a professional opinion based on the data obtained during the investigation and should not be considered a definitive statement that a hazardous contaminant or conditions are, or is not, present in the area of study. These opinions have been derived in accordance with current standards of practice.

This report is intended solely for use by the parties to whom it is addressed. This report is not intended for and may not contain sufficient information for purposes other than qualitative evaluation of asbestos or conditions at the time of our evaluation. Reliance on this report for other purposes or by other parties shall be at the user's sole risk.

WARRANTY

MTGL, Inc. warrants that the findings contained herein have been prepared with the level of care and skill exercised by experienced and knowledgeable environmental consultants who are appropriately licensed or otherwise trained to perform asbestos inspections and assessments pursuant to the scope of work required on this project. MTGL's Asbestos Survey Reports are prepared by trained certified professionals without a conflict of interest in the demolition(s) or renovation project(s) as per the Business and Professions Code 7180 (BP7180).

MTGL, Inc. warrants that the findings contained herein have been prepared in general accordance with accepted professional practices as applied by similar professionals in the community at the time of its preparation. Changes in the state of the art or in applicable regulations cannot be anticipated and have not been addressed in this report.

The survey included inspection of visible and accessible materials. MTGL did not inspect or sample inaccessible areas and did not dismantle any part of the structure to survey inaccessible areas. For the purpose of this warranty, inaccessible is defined as areas that could not be tested (sampled) without destruction of the structure or a portion of the structure. Inaccessible materials that are visible to MTGL's inspectors shall be assumed to be asbestos containing. No other warranty is expressed, or implied.

SECTION 3 ASBESTOS SURVEY METHODOLOGY

GENERAL REFERENCES

The asbestos survey consisted of two major activities: visual inspection and sampling. Although these activities are listed separately, they are integrated tasks.

VISUAL INSPECTION

The visual inspection was performed by an AHERA Certified Building Inspector under the direction of a California Certified Asbestos Consultant. An initial building walkthrough was conducted to determine the presence of suspect materials that were accessible or exposed. Materials that were similar in general appearance were grouped into homogeneous sampling areas.

HOMOGENEOUS MATERIAL CLASSIFICATIONS

A preliminary walkthrough of the building was conducted to determine areas of materials that were visually similar in color, texture, and general appearance and that appeared to have been installed at the same time. Such materials are termed "homogeneous materials" by the EPA. During this walkthrough, the approximate locations of these homogeneous materials were noted. Only materials that were accessible or exposed and suspected to contain asbestos were identified.

Following the EPA protocols, each identified suspect homogeneous material is placed in one of the following EPA classifications:

- Surfacing Materials (spray or trowel applied materials)
- Thermal System Insulation (materials applied to various mechanical systems)
- Miscellaneous Materials (any material which do not fit either of the above categories, such as floor tiles, etc.)

SAMPLING PROCEDURES

Following the walkthrough, the inspector collected selected samples of exposed or accessible materials identified as suspect material. Sampling was limited to accessible materials not involving destruction of walls, other building elements, physical barriers, or the structural integrity of the item being tested.

EPA guidelines were used to determine the sampling protocol. Sampling locations that were chosen to be representative of the homogeneous sampling area. While an effort was made to collect samples randomly, samples were taken preferentially from damaged areas or areas which were the least visible to minimize disturbance of the material.

Samples of surfacing material were collected in general accordance with the EPA random sampling protocol outlined in the EPA publication, "Asbestos in Buildings: Simplified Sampling Scheme for Friable Surfacing Materials" (EPA 560/5-85-030a, October 1985).

Samples of miscellaneous materials were also taken as randomly as possible, while attempting to sample already damaged areas so as to minimize disturbance of the material.

A minimum of three samples were collected of each homogeneous material. Depending on the quantity of homogeneous material, additional samples may be collected to avoid the possibility of false negative results.

LABORATORY PROCEDURES

Method of Analysis

Analysis was performed by visually observing the bulk sample and preparing slides for microscopic examination and identification. The samples were mounted on slides and then analyzed for asbestos (chrysotile, amosite, crocidolite, anthophyllite, and actinolite/tremolite), fibrous non-asbestos constituents (mineral wool, paper, etc.) and nonfibrous constituents. Asbestos was identified by refractive indices, morphology, color, pleochroism, birefringence, extinction characteristics, and signs of elongation. The same characteristics were used to identify the non-asbestos constituents.

The microscopist used a stereoscope to visually estimate relative amounts of each constituent using a stereoscope to determine the volume of each constituent in proportion to the total volume of the sample.

All bulk samples were analyzed by Polarized Light Microscopy (PLM) with dispersion staining as described by the Interim Method of the Determination of Asbestos in Bulk Insulation, Federal Register, 40 CFR Ch. 1 Pt. 763, App. A to Subpart. F, July 1, 1987. This is a standard method of analysis in optical mineralogy and the currently accepted method for the determination of asbestos in bulk samples. A suspect material is immersed in a solution of known refractive index and subjected to illumination by polarized light. The characteristic color displays that result enable mineral identification. It should be noted that some ACM may not be accurately identified or quantified by PLM. As an example, the original fabrication of vinyl floor tiles routinely involved milling of asbestos fibers to extremely small sizes. As a result, these fibers may go undetected under the standard polarized light microscopy method. Transmission Electron Microscopy (TEM) is recommended for a more definitive analysis of these materials. MTGL, Inc. has no control over how the laboratory describes materials or layers of materials being analyzed. Although a minimum of three samples are collected of suspect building materials, first positive stops may be requested of the laboratory and the results of the one positive sample will be reported. All other homogeneous materials will be assumed to be positive for asbestos content.

Laboratory Quality Control Program

MTGL, Inc. only uses laboratories that maintain an in-house quality control program. This program involves blind reanalysis of ten percent of all samples, precision and accuracy controls, and use of standard bulk reference materials.

SECTION 4 ASBESTOS OBSERVATIONS AND FINDINGS

SUMMARY

Table 1: Positively Identified Materials that Contain Asbestos (ACM and ACCM) and Assessment of Material Condition (as of the date the survey was conducted). Laboratory Results can be found in Appendix 1.

Material* Description	Location*	Sample #	Approximate Quantity**	AHERA Rank***	Friability/ Material Type	Damage Category	Quantity of Contamination (If any) **	Asbestos Content
Roofing Material	Roof		10,000		Inaccessible		Inaccessible	Assumed

Note: The roof materials were not tested at the time of the inspection due to compromising the warranty on the roof. Roofing materials are assumed to contain asbestos until further testing can be determined otherwise.

*Positively identified ACM and ACCM that are similar in color and texture in other locations throughout the structure and facility shall be considered as asbestos containing until further sampling/analysis determines otherwise. In the event suspect asbestos containing materials are discovered during maintenance, renovation and/or demolition that are not identified in this report, disturbance of the materials should be stopped until further assessment of the material for asbestos content can be conducted.

**MTGL, Inc. is not responsible for actual quantity of the material(s). MTGL recommends bidding contractors measure and calculate quantities for estimated abatement costs and notifications. (sf= square foot; NA= not applicable))

***Each homogeneous area of friable and non-friable asbestos-containing material (ACM) was classified into one of the following seven categories, as specified in EPA's AHERA regulations (40 CFR 763.88):

- (1) Damaged or significantly damaged thermal system insulation ACM.
- (2) Damaged friable surfacing ACM.
- (3) Significantly damaged friable surfacing ACM.
- (4) Damaged or significantly damaged friable miscellaneous ACM.
- (5) ACBM with potential for damage.
- (6) ACBM with potential for significant damage.
- (7) Any remaining friable ACBM or friable suspected ACBM.
- (X) Not applicable (material is non-friable surfacing or miscellaneous material).

The damage categories are defined as follows:

Category 1 - "Undamaged" means the material had no visible damage, or extremely minor damage or surface marring (i.e., a room full of floor tile with only two or three small corners chipped off on the tile).

Category 2 - "Damaged" means the material had visible damage evenly distributed over less than 10% of its surface, or localized over less than 25% of its surface.

Category 3 - "Significantly Damaged" means the material had visible damage that is evenly distributed over 10% or more of its surface, or localized over 25% or more if its surface.

Table 2: Materials found to be Negative for Asbestos (as of the date the survey was conducted). Laboratory results can be found in Appendix 1.

Material* Description	Sample #
Grey Sheet Vinyl	1,2,3
2'x2' Dotted Ceiling Tile	4,5,6
Structural Fireproofing	7,8,9, 10, 11
HVAC Insulation	12, 13, 14
Finished Drywall	15, 16, 17
Cove Base Glue	18, 19, 20
Pipe Insulation	21, 22, 23
HVAC Seam Caulk	24, 25, 26
Carpet Glue	27, 28, 29
FSB Board	30, 31, 32
Expansion Caulk	E1, E2, E3
Concrete Sidewalk	E4, E5, E6
Exterior Concrete Block	E7, E8, E9
Exterior Texture Coating	E10, E11, E12
Asphalt	E13, E14, E15

GENERAL INFORMATION

Environmental Protection Agency (EPA)

According to the South Coast Air Quality Management District's Rule 1402paragraph (H)(2)(C), the analysis of composite samples of multi-layered material including, but not limited to, stucco (base and scratch coat) and wall systems is prohibited for the quantification of asbestos content. All separable layers shall be analyzed and reported separately for asbestos content.

These materials are eligible for analyzed using 1,000 Point Count with Gravimetric Reduction methods. Analysis would be conducted per strata and materials found to be greater than 0.1% asbestos are regulated by OSHA and handled as asbestos containing until packaged and stored for disposal. Materials greater than 1% are regulated by EPA/APCD and would require disposal as asbestos containing material.

A material is considered by the EPA and the State of California to be asbestos-containing if at least one sample collected from the area shows asbestos present in an amount greater than one percent (>1%).

California Occupational Safety & Health Agency (Cal/OSHA)

Title 8, California Code of Regulation 1529 defines asbestos-containing construction materials as materials containing greater than one-tenth of one percent (0.1%) asbestos by weight. Under this code, materials containing between 0.1% and 1% asbestos are regulated as other regulated operations. Although operations involving materials containing between 0.1% and 1% asbestos are not considered Class I, II, or III work, several sections of the standard are applicable, including negative exposure assessments and the use of regulated areas.

Laboratory analysis may report materials as "Trace Asbestos". These materials are assumed to be greater than 0.1%. Upon client request, these materials can be analyzed using 1,000 Point Count with Gravimetric Reduction methods. Materials found to be greater than 0.1% asbestos are regulated by OSHA and handled as asbestos containing until packaged and stored for disposal.

Please refer to the laboratory analysis for a more detailed description of the microscopic analysis of these samples.

Asbestos-containing materials (ACM) are regulated by federal, state, and local agencies, which include but may not be limited to the following:

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) requires an inspection for asbestos be done on facilities that are to undergo demolition or renovation work. Materials found to contain asbestos may need to be removed prior to the start of such demolition/renovation work.

NESHAP defines Category I non-friable asbestos-containing materials as gaskets, resilient floor covering, and asphalt roofing products that contain more than one percent asbestos, and Category II non-friable as any materials, except for Category I non-friable, that contain more than one percent asbestos and cannot be reduced to a powder by hand pressure when dry. NESHAP defines a Regulated Asbestos-Containing Material (RACM) as: (a) friable ACM, (b) Category I non-friable that has become friable, (c) Category I non-friable that has or may be subject to sanding, grinding, cutting, or abrading, and (d) Category II non-friable that may or has become friable during demolition or renovation.

SECTION 5 CONCLUSIONS & RECOMMENDATIONS

CONCLUSIONS

On this limited asbestos survey, materials observed and tested for asbestos were negative for asbestos content.

The roof materials were not tested at the time of the inspection due to compromising the warranty on the roof. All roofing materials are assumed to contain asbestos until further testing can be determined otherwise.

RECOMMENDATIONS

If during renovation activities, materials other than the ones discussed in this report are observed, the materials should be tested for asbestos content prior to disturbance.

General

MTGL recommends that all asbestos containing materials be removed prior to any renovation and/or demolition activities, which may impact the materials. A Licensed Abatement Contractor in the State of California should perform the removal activities.

Removal of ACM/ACCM should be conducted in accordance with EPA and OSHA requirements for Federal, State and Local rules and regulations. All asbestos removal should be conducted using wet methods and engineering controls to reduce airborne fiber concentrations. OSHA required personal protective equipment must be used for worker protection.

All activities that may disturb or disrupt asbestos containing material must be conducted in properly demarcated regulated areas using wet removal methods.

Proper decontamination methods must be used by all workers entering and leaving regulated work areas where asbestos containing materials are being removed.

In the event ACM or ACCM materials are observed to be damaged and/or visible contamination is present, isolate the immediate area, turn off HVAC systems. Only properly trained and certified workers may enter the work area to conducted clean-up activities using wet methods.

If renovation and/or demolition activities do not impact the asbestos containing materials, then the materials can be managed in place. Periodic surveillance is recommended. An Operations & Maintenance (O&M) program should be established and conducted by properly trained personnel. Minimum training for each type of material that has been identified should be given as required by Cal/OSHA. Additionally, postings would be required in all publicly accessible areas warning of the potential hazard to satisfy the Proposition 65 & Hazard Communication regulations.

SECTION 6 APPENDICES

APPENDIX 1 ASBESTOS LABORATORY RESULTS & CHAIN OF CUSTODY



Report for:

Mr. Carl Tucker MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126

Eurofins EPK Built Environment Testing, LLC Project: Vanir Const. - OC Juvenile Hall; 331 The City of Orange B4 Regarding:

EMĹ ID: 3592270

Approved by:

Dates of Analysis: Asbestos PLM: 04-03-2024

Approved Signatory Carlos Rivadeneyra

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267) NVLAP Lab Code 500034-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Date of Sampling: 03-29-2024 Date of Receipt: 03-30-2024 Date of Report: 04-03-2024

C/O: Mr. Carl Tucker

Client: MTGL, Inc.

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B4

ASBESTOS PLM REPORT

Total Samples Submitted: 32 **Total Samples Analyzed:** 32 **Total Samples with Layer Asbestos Content > 1%:** 0

Lab ID-Version 1: 17567382-1

Lab ID-Version 17567383-1

Lab ID-Version : 17567385-1

EMLab ID: 3592270, Page 2 of 9

Location: 1. Grev Sheet Vinvl

200001011 2, 01 0j 211000 + 111j1		
Sample Layers	Asbestos Content	
Brown Woven Material (Mesh)	ND	
Gray Cove Base	ND	
Composite Non-Asbestos Content: 15% Cellulose		
Sample Composite Homogeneity:	Poor	

Location: 2, Grev Sheet Vinyl

Sample Layers	Asbestos Content
Brown Woven Material (Mesh)	ND
Gray Cove Base	ND
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity:	Poor

Location: 3. Grev Sheet Vinvl

Location: 3, Grey Sheet Vinyl	Lab ID-Version‡: 17567384-1	
Sample Layers	Asbestos Content	
Brown Woven Material (Mesh)	ND	
Gray Cove Base	ND	
Composite Non-Asbestos Content:	15% Cellulose	
Sample Composite Homogeneity:	Poor	

Location: 4, 2'x2' Dotted Ceiling Tile

, 8	
Sample Layers	Asbestos Content
Gray Ceiling Tile	ND
Composite Non-Asbestos Content:	60% Cellulose
-	10% Glass Fibers
Sample Composite Homogeneity:	Moderate

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

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Lab ID-Version‡: 17567386-1

Lab ID-Version : 17567387-1

EMLab ID: 3592270, Page 3 of 9

Date of Sampling: 03-29-2024 Date of Receipt: 03-30-2024 Date of Report: 04-03-2024

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of Orange B4

ASBESTOS PLM REPORT

Location: 5, 2'x2' Dotted Ceiling Tile

Sample Layers	Asbestos Content	
Gray Ceiling Tile	ND	
Composite Non-Asbestos Content:	60% Cellulose	
_	10% Glass Fibers	
Sample Composite Homogeneity:	Moderate	

Location: 6, 2'x2' Dotted Ceiling Tile

Sample Layers	Asbestos Content
Gray Ceiling Tile	ND
Composite Non-Asbestos Content:	60% Cellulose 10% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 7, Structured Fireproofing	Lab ID-Version‡: 17567388-1
Sample Layers	Asbestos Content
Gray Fireproofing	ND
Composite Non-Asbestos Content:	40% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 8, Structured Fireproofing	Lab ID-Version‡: 17567389-1
Sample Layers	Asbestos Content
Gray Fireproofing	ND
Composite Non-Asbestos Content:	40% Cellulose
Sample Composite Homogeneity:	Moderate

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(800) 651-4802 www.eurofinsus.com/Built

Lab ID-Version‡: 17567390-1

Lab ID-Version 1: 17567393-1

EMLab ID: 3592270, Page 4 of 9

Client: MTGL, Inc. C/O: Mr. Carl Tucker Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B4

Date of Sampling: 03-29-2024 Date of Receipt: 03-30-2024 Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Location: 9, Structured Fireproofing

Sample Layers	Asbestos Content
Gray Fireproofing	ND
Composite Non-Asbestos Content:	40% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 10, Structured Fireproofing	Lab ID-Version‡: 17567391-1
Sample Layers	Asbestos Content
Gray Fireproofing	ND
Composite Non-Asbestos Content:	40% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 11. Structured Fireproofing

Location: 11, Structured Fireproofing	Lab ID-Version‡: 17567392-1
Sample Layers	Asbestos Content
Gray Fireproofing	ND
Composite Non-Asbestos Content:	40% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 12, HVAC Insulation

Sample Layers	Asbestos Content
White Insulation	ND
Brown Paper	ND
Tan Woven Material (Mesh)	ND
Silver Wrap	ND
Composite Non-Asbestos Content:	70% Glass Fibers 10% Cellulose
Sample Composite Homogeneity:	Poor

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9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B4

Date of Sampling: 03-29-2024 Date of Receipt: 03-30-2024 Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Location: 13, HVAC Insulation

Location: 13, HVAC Insulation	Lab ID-Version‡: 17567394-1
Sample Layers	Asbestos Content
Brown Paper	ND
Tan Woven Material (Mesh)	ND
Silver Wrap	ND
Composite Non-Asbestos Content:	10% Cellulose 10% Glass Fibers
Sample Composite Homogeneity:	Poor

Location: 14, HVAC Insulation

Lab ID-Version 1: 17567395-1 Sample Lavers **Asbestos Content** White Insulation ND Brown Paper ND Silver Wrap ND Composite Non-Asbestos Content: |70% Glass Fibers 10% Cellulose **Sample Composite Homogeneity:** Poor

Location: 15. Finished Drywall

Eccution: 12, 1 Implied D1 y wall	240 12 (01010114, 170070) 0 1
Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
White Joint Compound	ND
Cream Tape	ND
White Compound	ND
White Paint	ND
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity:	Poor

Location: 16. Finished Drywall

Location: 16, Finished Drywall	Lab ID-Version‡: 17567397-1
Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
White Joint Compound	ND
White Paint	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

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 \ddagger A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Lab ID-Version 1: 17567396-1

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(800) 651-4802 www.eurofinsus.com/Built

Lab ID-Version‡: 17567398-1

Lab ID-Version +: 17567300-1

EMLab ID: 3592270, Page 6 of 9

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B4

Date of Sampling: 03-29-2024 Date of Receipt: 03-30-2024 Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Location: 17, Finished Drywall

	,
Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
White Joint Compound	ND
White Paint	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

Location: 18. Cove Base Glue

cation. 10, cove dase Give	Lab ID- Version ₄ . 1730/359-1
Sample Layers	Asbestos Content
White Cove Base Glue	ND
White Paint	ND
White Joint Compound (Trace)	ND
Sample Composite Homogeneity:	Poor

Location: 19, Cove Base Glue

Location: 19, Cove Base Glue	Lab ID-Version‡: 17567400-1
Sample Layers	Asbestos Content
White Cove Base Glue	ND
White Paint	ND
White Joint Compound (Trace)	ND
Sample Composite Homogeneity:	Poor

Location: 20, Cove Base Glue

Location: 20, Cove Base Glue	Lab ID-Version‡: 17567401-1
Sample Layers	Asbestos Content
White Cove Base Glue	ND
White Paint	ND
White Joint Compound (Trace)	ND
Sample Composite Homogenei	ty: Poor

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9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Lab ID-Version‡: 17567402-1

Lab ID-Version 1: 17567403-1

Lab ID-Version : 17567404-1

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B4

Date of Sampling: 03-29-2024 Date of Receipt: 03-30-2024 Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Location: 21, Pipe Insulation

Sample Layers	Asbestos Content
Yellow Insulation	ND
White Insulation	ND
White Woven Material (Mesh)	ND
Composite Non-Asbestos Content:	
	10% Cellulose
Sample Composite Homogeneity:	Poor

Location: 22. Pipe Insulation

20cmion 22, 1 pc modulion	
Sample Layers	Asbestos Content
Yellow Insulation	ND
White Insulation	ND
Silver Wrap	ND
Composite Non-Asbestos Content:	50% Glass Fibers
_	10% Cellulose
Sample Composite Homogeneity:	Poor

Location: 23, Pipe Insulation

Sample Layers	Asbestos Content
Yellow Insulation	ND
White Insulation	ND
Yellow Paint	ND
White Woven Material (Mesh)	ND
Silver Wrap	ND
Composite Non-Asbestos Content:	
	10% Cellulose
Sample Composite Homogeneity:	Poor

Location: 24 HVAC Seam Caulk

Location: 24, HVAC Seam Caulk	Lab ID-Version‡: 17567405-1
Sample Layers	Asbestos Content
Gray Caulk	ND
Sample Composite Homogeneity:	Moderate

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(800) 651-4802 www.eurofinsus.com/Built

Lab ID-Version †: 17567406-1

Lab ID-Version 1: 17567408-1

Lab ID-Version †: 17567409-1

EMLab ID: 3592270, Page 8 of 9

Date of Sampling: 03-29-2024 Date of Receipt: 03-30-2024 Date of Report: 04-03-2024

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B4

ASBESTOS PLM REPORT

Location: 25, HVAC Seam Caulk

Location: 25, 11 vite Scam Caunk	240 12 1010114. 17007.00 1
Sample Layers	Asbestos Content
Gray Caulk	ND
Sample Composite Homogeneity:	Moderate

Location: 26, HVAC Seam Caulk	Lab ID-Version‡: 17567407-1
Sample Layers	Asbestos Content
Gray Caulk	ND
Sample Composite Homogeneity:	Moderate

Location: 27, Carpet Glue

Sample Layers	Asbestos Content							
Gray Carpet Glue	ND							
Sample Composite Homogeneity:	Moderate							

Location: 28 Carnet Glue

Location: 20, Carpet Gluc	240 12 (1750) 17
Sample Layers	Asbestos Content
Gray Carpet Glue	ND
Sample Composite Homogeneity:	Moderate

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9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

EMLab ID: 3592270, Page 9 of 9

Client: MTGL, Inc. C/O: Mr. Carl Tucker Date of Sampling: 03-29-2024 Re: Vanir Const. - OC Juvenile Hall; 331 The City of Orange B4

Date of Receipt: 03-30-2024 Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Location: 29, Carpet Glue Lab ID-Version : 17567410-1

Sample Layers	Asbestos Content							
Gray Carpet Glue	ND							
Sample Composite Homogeneity:	Moderate							

Location: 30, FSB Lab ID-Version : 17567411-1

Sample Layers	Asbestos Content
White Semi-Fibrous Material	ND
Composite Non-Asbestos Content:	10% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 31, FSB Lab ID-Version 1: 17567412-1

Sample Layers	Asbestos Content
White Semi-Fibrous Material	ND
Composite Non-Asbestos Content:	10% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 32, FSB Lab ID-Version : 17567413-1

Sample Layers	Asbestos Content
White Semi-Fibrous Material	ND
Composite Non-Asbestos Content:	10% Glass Fibers
Sample Composite Homogeneity:	Moderate

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CHAIN OF CUSTODY 💸 eurofins

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East: (866) 871-1984

Buill Environment Testing

٧	VEATHER	Fog	Rain	Snow	Wind	Clear
3-1	None				1	
Æ	Light					
	Moderate					
~	Heavy					

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BioCasse

Non-Culturable

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				T INFORMA									Bacteria)			7400)			
Company: Contact:	MTGLI Inc. Address: 7742 Arjons DR., San Diggict Special instructions: 619-454-7851									(e)	-	Asp spp.]	p spp.) Air and Surface	acutas		er Count (NIOSH 7			
	PRO	JECT INFORMATIO			//====== i 1).	TURN AROUND	TIME CODES - (TAT)	domo	upprement ualitative)	exam	40.8	+ A	oe/Abser		e Fibe			
Project ID: Project Description: Project Zip Code:	Vanir (331 Tl 92868 5D8-24-0	oust OC. City of Sampling Date/Time Sampled Sal. I C By:	Juvenile Oronge 53/29	Hal 134 123	ND - Next	andard (Default) t Business Day ne Business Day ekend/Holiday/AS/	or on wee considered next busine alert us in	erved after 2pm kends, will be d received the ess day. Please n advance of analysis needs.	rap Analysis	biological particles - suppr Microscopic Exam (Qualit	ative spore count direct	a Surface Fumpi (Genus	ble Air Fungi (Genus ID + As Stain and Counts (Culturable	neile culture	QuantiTray-Sewinge Screen OTHER (please specify test)	os in Air - PCM Airborn	Bulk - Pt	(please specify test)	ins (please specify test)
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BC - BioCa A1S - Ande SAS - Surfa		CP - Contact Plate ST - Spore Trap B - Bulk	T - Tape SW - Swab SO - Soil	O - Other:	C	Wichel	histma Thistma	3/29/24	-	1		5	Cony	العا	3	3	150	1011	124

CHAIN OF CUSTODY 💸 eurofins

www.eurofinsus.com/Built

Built Environment Testing

WEATHER Fog Rain Snow Wind Clear None LEVEL ight Moderate Heavy

REQUE

Non-Culturable

BioCasse East: (866) 871-1984 Tape, Swab, W. Central: (800) 651-4802 Trap Swab, Bulk West: (866) 888-6653 CONTACT INFORMATION MTGL, Inc. Company CARLTUCKU Contact: 619-454-7851 Phone PROJECT INFORMATION TURN AROUND TIME CODES - (TAT) STD - Standard (Default) Rushes received after 2pm Project ID: or on weekends, will be 331 The City of Cronge B Project ND - Next Business Day considered received the Description: next business day. Please Project 92868 SD - Same Business Day alert us in advance of Zip Code weekend analysis needs. WH - Weekend/Holiday/ASAP 508E-24-061.1CT By PO Number Total Sample NOTES TAT Volume/Area DESCRIPTION Type SAMPLE ID (Time of day, Temp, RH, etc.) (Above) Finished Drywall Core Base 6hile Pipe Insulation HVAC Seam Coulk Caupet Give (as applicable) (Below) 16 RECEIVED-BY DATE & TIME DATE & TIME RELINQUISHED BY SAMPLE TYPE CODES 3/30/24 O - Other CP - Contact Plate T - Tape BC - BioCassette 10:429 chy was SW - Swab ST - Spore Trap A1S - Andersen SO - Soil B - Bulk SAS - Surface Air Sampler P - Potable Water D - Dust NP - Non-potable Water

CHAIN OF CUSTODY 💸 eurofins

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Built Environment Testing

Fog Rain Snow Wind Clear WEATHER None LEVEL Light Moderate Heavy

Non-Culturable

Swab, Bulk

Sweb, Water, Bu

Contact

Spore

Trap

REQUESTE	
Cultura	TANKS THE ENGINEERING STATES OF THE SAME O
BioCassette " Ar	003592270

003592270

East: (866) 871-1984 Central: (800) 651-4802 West: (866) 888-6653

/est: (866) 888-6653								П		П			10							
		CONTACT											Bacteri		М		7400)			1
ontact CARLT	LIENC.	Ad Sp	dress: 7 ecial Instru	742 A	Arjons DR	., San Diogoj	4 2/26					(dds ds	spp.) and Surface		nce)		Count (NIOSH 7400)			
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PR	OJECT INFORMATIO	N I	11 6	ern Sta	ndard (Default)	Rushes received			- supplement (Qualitative)	direct exam		Ol sur	fural		ence	9	Airborne			C
oject ID: Vanir	Coust, - OC. the City of Sampling Date/Time Sampled	overele 1	B4	C/10=10=100	Business Day	or on weekend considered red	ds, will be ceived the		A 100	count dir	up	Fungi (Genus	i (Genus units (Cu		coir (Presence/Absence) de Screen	sectfy tes	PCM Airbo	21 6	A A	specify test)
		5 3/2	9/24		e Business Day ekend/Holiday/ASA	next business d alert us in ad weekend analy	ivance of	Analysis	Other biological particles Direct Microsoppic Exam	a spore	Dust Characterization	1-Media Surface Fu	Culturable Air Fungi (Genus ID + Asp. Gram Stain and Counts (Culturable Air	culture	Sewa	OTHER (please specify lest)	A.	Asbestos Bulk - PLM	Lead (Pb) - Flame Av.	Allergens (please
O Number 5DRE 24	-061.1CT By:	Cu	Sample		Total	NOTES		e Trap	biblio	Quantitative	Chan	S eigh	n Stal	ellenoiga.	Total Colifo Oxignt Trav	ER.	Asbestos In	estos	d (Pb	rgens
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	SAMPLE TYPE COL	nes		7	RELINQUISH	HED, BY DA	ATE & TIME	īĒ			RE	CE	y€D	вү						TIME
BC - BioCassette	CP - Contact Plate ST - Spore Trap	The Polyaday - 110	o - Other:	9E	Westle &	le hiesen	3/29/29	1	9	_	1	>	San	ク	The same	7	31	100	24	20
SAS - Surface Air Sample	P - Potable Water	D - Dust			11						-86				_					



Report for:

Mr. Carl Tucker MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126

Eurofins EPK Built Environment Testing, LLC Project: Vanir Const. - OC Juvenile Hall; 331 The City of Orange B4 Regarding:

EML ID: 3592271

Approved by:

Dates of Analysis: Asbestos PLM: 04-04-2024

Approved Signatory Carlos Rivadeneyra

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267) NVLAP Lab Code 500034-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Date of Sampling: 03-28-2024 Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B4

ASBESTOS PLM REPORT

Total Samples Submitted: 15 **Total Samples Analyzed:** 15

Lab ID-Version †: 17567315-1

EMLab ID: 3592271, Page 2 of 5

Total Samples with Layer Asbestos Content > 1%: 0

Location: E-1, Expansion Caulk	Lab ID-Version‡: 17567314-1
Sample Layers	Asbestos Content
Gray Caulk	ND
Sample Composite Homogeneity:	Moderate

Location: E-2. Expansion Caulk

Location: L 2, Expansion Cault	240 12 (0.00014, 17,007,010 1
Sample Layers	Asbestos Content
Gray Caulk	ND
Sample Composite Homogeneity:	Moderate

Location: E-3, Expansion Caulk	Lab ID-Version‡: 17567316-1
Sample Layers	Asbestos Content
Gray Caulk	ND
Sample Composite Homogeneity:	Moderate

Location: E.4 Concrete Sidewalk

Location: E-4, Concrete Sidewalk	Lab ID-Version‡: 17567317-1
Sample Layers	Asbestos Content
Gray Concrete	ND
Composite Non-Asbestos Content:	2% Glass Fibers
Sample Composite Homogeneity:	Moderate

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Lab ID-Version‡: 17567318-1

Lab ID-Version 1: 17567319-1

Lab ID-Version : 17567320-1

EMLab ID: 3592271, Page 3 of 5

Client: MTGL, Inc. C/O: Mr. Carl Tucker Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B4

Date of Sampling: 03-28-2024 Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: E-5, Concrete Sidewalk

Sample Layers	Asbestos Content
Gray Concrete	ND
Composite Non-Asbestos Content:	2% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: E-6. Concrete Sidewalk

Zocation Z o, concrete state water	
Sample Layers	Asbestos Content
Gray Concrete	ND
Composite Non-Asbestos Content:	2% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: E-7. Ext Concrete Block

Sample Layers	Asbestos Content			
Beige Concrete	ND			
Beige Paint	ND			
Sample Composite Homogeneity: Moderate				

Location: E-8, Ext Concrete Block	Lab ID-Version‡: 17567321-1
Sample Layers	Asbestos Content
Beige Concrete	ND
Beige Paint	ND
Sample Composite Homogeneity:	Moderate

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Lab ID-Version‡: 17567322-1

Lab ID-Version 1: 17567323-1

EMLab ID: 3592271, Page 4 of 5

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B4

Date of Sampling: 03-28-2024 Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: E-9, Ext Concrete Block

Sample Layers	Asbestos Content			
Beige Concrete	ND			
Beige Paint	ND			
Sample Composite Homogeneity: Moderate				

Location: E-10. Ext Textured Coating

g	
Sample Layers	Asbestos Content
Gray Coating	ND
Gray Paint	ND
Sample Composite Homogeneity:	Moderate

Location: E-11. Ext Textured Coating

Location: E-11, Ext Textured Coating	Lab ID-Version‡: 17567324-1						
Sample Layers	Asbestos Content						
Gray Coating	ND						
Gray Paint	ND						
Sample Composite Homogeneity:	Moderate						

Location: E-12, Ext Textured Coating	Lab ID-Version‡: 17567325-							
Sample Layers	Asbestos Content							
Gray Coating	ND							
Gray Paint	ND							
Sample Composite Homogeneity:	Moderate							

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

EMLab ID: 3592271, Page 5 of 5

C/O: Mr. Carl Tucker Date of Sampling: 03-28-2024 Re: Vanir Const. - OC Juvenile Hall; 331 The City of Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Client: MTGL, Inc.

Orange B4

Location: E-13, Asphalt Lab ID-Version‡: 17567326-1

Sample Layers	Asbestos Content						
Black Asphalt	ND						
Sample Composite Homogeneity: Moderate							

Location: E-14, Asphalt Lab ID-Version : 17567327-1

Sample Layers	Asbestos Content						
Black Asphalt	ND						
Sample Composite Homogeneity:	Moderate						

Location: E-15, Asphalt Lab ID-Version 1: 17567328-1

Sample Layers	Asbestos Content
Black Asphalt	ND
Sample Composite Homogeneity:	Moderate

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

CHAIN OF CUSTODY : eurofins www.eurofinsus.com/Built WEATHER Fog Rain Snow Wind Clear Weather Fog Rain Sn					tow Wind Clear					ı	REQU	1	EE HOUSENSA								
East: (866) 871-1984 Central: (800) 651-4802 West: (866) 888-6653			1 3 1	Light Moderate Heavy				Spore Tay Trap Swate		pe,	BioCass		003592271								
	CONTA	CT INFORM	ATION											3	9			8		I	Ť
1.	MTGI, Inc. CARLTUCKU 619-454-7851	Address: 7 Special Instr		rjon	S DR.	San	Diago	192126					i-gds ske	(dds	THE SHARE SHARE BEING	nce)		Court (NICSH 740)			
	PROJECT INFORMATION		1	TURN A	ROUND TII	ME CO	DES - (T	AT)		emen	(Ousitative)		0+4			Abse		ž			1
escription: roject p Code:	Vanir Coust Oc Juvenil 331 The City of Orange 92868 Date Time: 5 3 DAE-24-061.10 By DB1	B4 128/24	ND - Next SD - Same WH - Wee	Business Busines	Day s Day	of connext	on week isidered busines ed us in	ved after 2pm ends, will be received the s day Please advance of alysis needs.	ep Analysis	biological particles - supplement	croscopic Exam (Qualitative live spore count direct exam	ractenzation	Surface Fungi (Genus ID + Asp	e Air Fungi (Genus ID + As	culture	form, Ecoli (Presenc	OTHER. (please specify test)	in Air - PCM Airhorns	Bulk) - Flame AM	(triesse specify test)
SAMPLE II	D DESCRIPTION	Sample Type (Below)	TAT (Above)	Volume (as appli	/Area	(Time o	NOTE f day, Te	ES mp, RH, etc.)	Spore Tri	15	Direct Mi	Dust Cha	1-Meda	Culturable	Legionella	Total Col	OTHER	Asbeitos in Air	Asbestos	Lead (Pb	PCM (pleate spot Allergens (please
13 45 67 89 10 1 1 1 3	Expantion caulk b Concrete Sidural Ext concrete bloc Ext textured coat Asphalt	k	STD	(591)																	

-A SAMPLE TYPE CODES RELINQUISHED BY DATE & TIME DATE & TIME RECEIVED BY 3130124 BC - BioCassette CP - Contact Plate T - Tape O - Other A1S - Andersen ST - Spore Trap SW - Swab SAS - Surface Air Sumpler B - Bulk SO - Soil P - Potable Water D - Dust NP - Non-potable Water

By submitting this Chain of Custody, you agree to be bound by the terms and conditions set forth at: https://www.eurofinsus.com/environment-testing/built-environment/rescurces/sampling-guidus-and-forms

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United States Department of Commerce National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 500034-0

Eurofins EMLab P&K

San Diego, CA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2024-01-01 through 2024-12-31

Effective Dates



For the National Voluntary Laboratory Accreditation Program



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Eurofins EMLab P&K

9445 Farnham St #103 San Diego, CA 92123 Quynh Nguyen Phone: 800-651-4802

Email: quynh.nguyen@et.eurofinsus.com https://www.eurofinsus.com/environment-testing/

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 500034-0

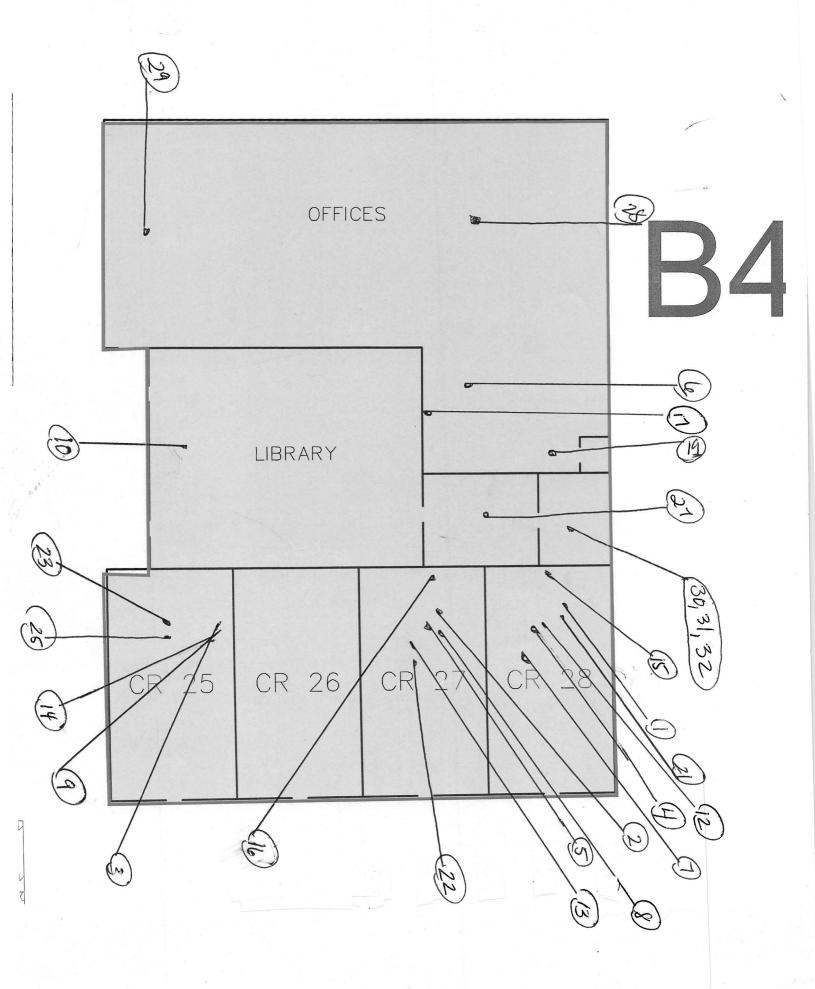
Bulk Asbestos Analysis

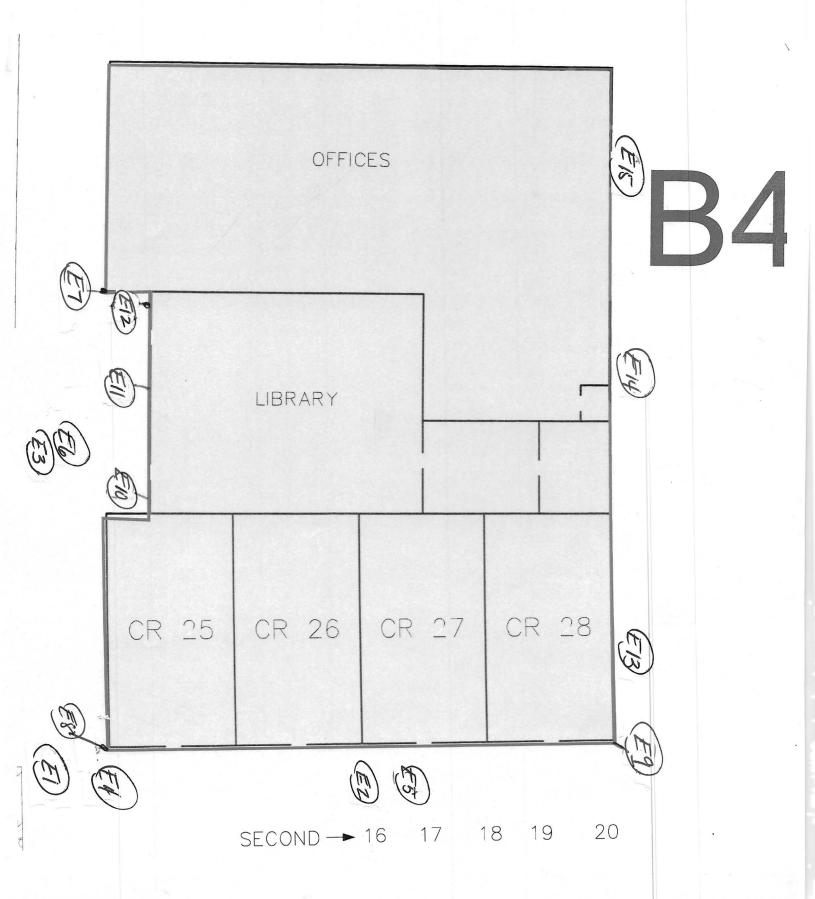
<u>Code</u>	<u>Description</u>
18/A01	EPA 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

For the National Voluntary Laboratory Accreditation Program

APPENDIX 2

SAMPLE LOCATION MAP (NOT TO SCALE)





APPENDIX 3 PHOTO DOCUMENTATION

Building 4



1. Typical view of classroom.



2. Classroom Bathroom/Kitchen



3. Interstitial above ceiling tiles.



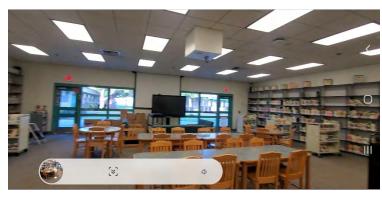
4. Fiberglass Pipe Insulation.



5. Library Break Room



6. Library Bathroom



7. Library



8. Office Spaces



9. Copy Room

APPENDIX 4 INSPECTOR CERTIFICATIONS

California Certified Asbestos Consultant (CAC)

Card Holder: <u>Michelle Ehresman</u>

Certification Number: <u>14-5323</u> Exp.: <u>11/19/2024</u>

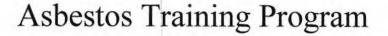
Current Employer: MTGL, Inc.

Supporting Certifications:

AHERA Contractor/Supervisor Refresher Certification
 AHERA Building Inspector Refresher Certification
 AHERA Management Planner Refresher Certification
 AHERA Project Designer Refresher Certification
 Exp. 7/27/2024
 Exp. 7/27/2024
 Exp. 8/16/2024



MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126 858-537-3999



This is to certify

Michelle Ehresman 1656

Has successfully completed 8 hours of formal training required by section 206 of TSCA II entitled

Contractor/Supervisor Refresher

Presented By **Environmental Compliance Training** PO BOX 16555 San Diego, CA. 92176-6555

(858) 558-7465

Director:

Walter T. Amenta, CIH, Approval Number CA-029-04

Class Dates:

06-24-2023

Exam Date:

n/a

Expiration Date: 06-24-2024

Certification Number: 0623ABCA167303

Asbestos Building Inspector Refresher Course

DOSH #: CA-015-06

Michelle Ehresman

ABIR0727230010N35227

David Wallach

Principal Instructor

7/27/2023

Course Start Date

7/27/2023

Course End Date

Michael W. Horner

Training Director

7/27/2023 Exam Date 7/27/2024

Expiration Date

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



NATEC International, Inc.

National Association of Training and Environmental Consulting



TIONAL 1100 Technology Circle, Suite A, Anaheim, CA 92805 · www.natecintl.com · 800-969-3228

Important Industry Contacts

CAL-OSHA:

Ph# (916) 574-2993

(916) 483-0572 Fax Notification Web: www.dir.ca.gov or calosha.com

CDPH/CLPPB:Ph# (510) 620-5600

Web: www.cdph.ca.gov/programs/CLPPB

SCAQMD:

Ph# (909) 396-3739

Fax#(909) 396-3342

BAAOMD:

Ph# (415) 749-4762

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PO Box 8657, Fountain Valley, CA 92728 (714) 678-2750, (800) 969-3228, Fax (714) 678-2757 www.natecintl.com

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National Association of Training and Environmental Consulting

This Card Acknowledges That Michelle Ehresman

Holds Training Certification For Asbestos Building Inspector Refresher Course

Expiration: 7/27/2024

ABIR0727230010N35227

Asbestos Project Designer Refresher Course

DOSH #:CA-015-10

Michelle Ehresman

APDR0816230004N35415

Norm Kramer

Principal Instructor

8/16/2023 Course Start Date 8/16/2023

Course End Date

8/16/2023

Exam Date

Michael W. Horner

Training Director

8/16/2024

Expiration Date

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



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Web: www.cdph.ca.gov/programs/CLPPB

SCAQMD:

Ph# (909) 396-3739 Fax#(909) 396-3342

BAAQMD:

Ph# (415) 749-4762

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NATEC International, Inc.

National Association of Training and Environmental Consulting
*Note: Card is not suitable substitute for certificate and is not accepted by SCAQMD as proof of
certification
This Card Askinguidades That

This Card Acknowledges That Michelle Ehresman

Holds Training Certification For Asbestos Project Designer Refresher Course

Expiration: 8/16/2024

Training Date 8/16/2023 APDR0816230004N35415

Asbestos Management Planner Refresher Course

DOSH #:CA-015-08

Michelle Ehresman

AMPR0727230007N35357

David Wallach

Principal Instructor

7/27/2023

Course Start Date

7/27/2023

Course End Date

7/27/2023

Exam Date

Training Director

Michael W. Horner

7/27/2024 **Expiration Date**

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



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Ph# (909) 396-3739 Fax#(909) 396-3342

BAAQMD:

Ph# (415) 749-4762

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NATEC International, Inc.

National Association of Training and Environmental Consulting

This Card Acknowledges That Michelle Ehresman

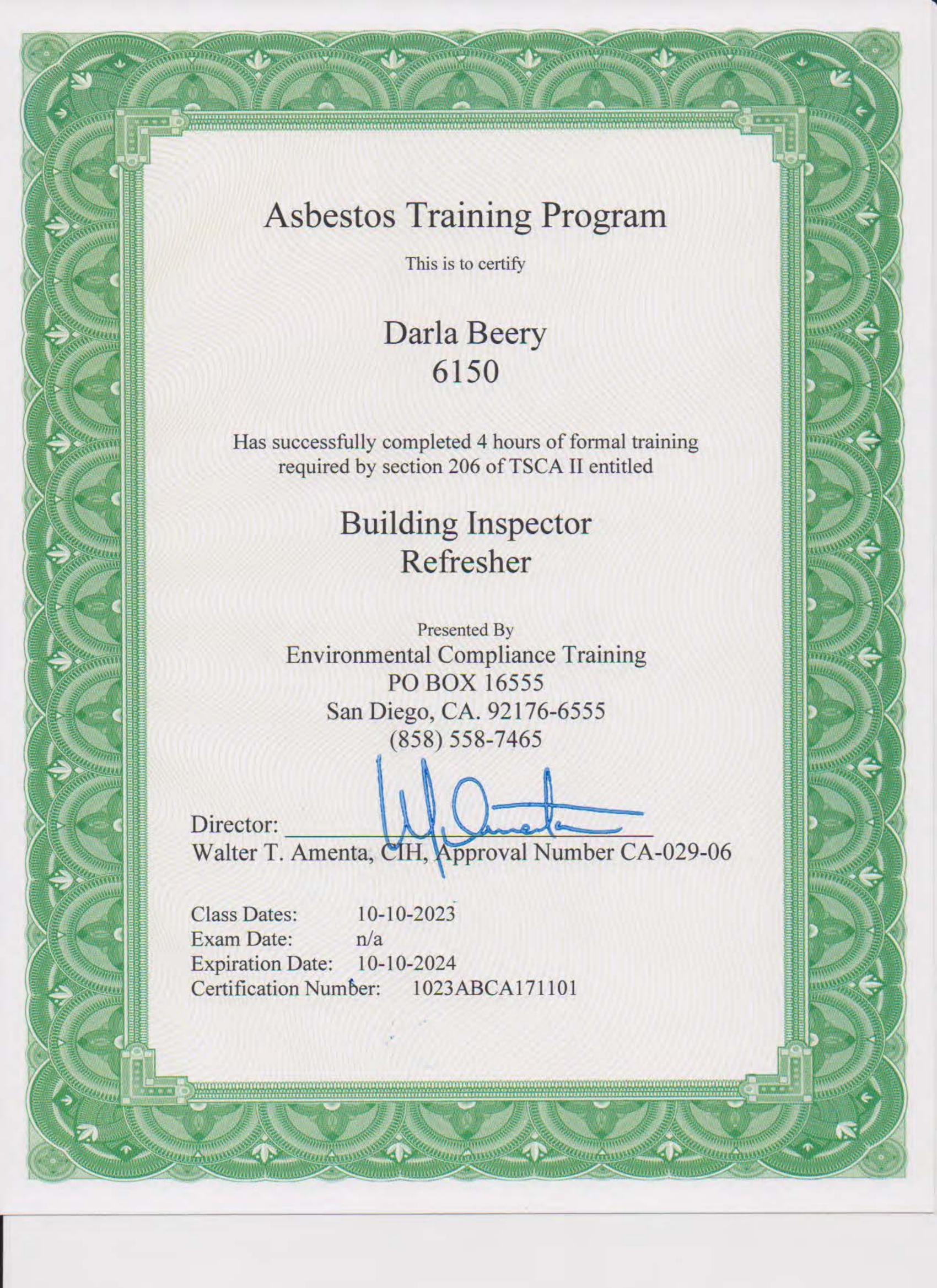
Holds Training Certification For Asbestos Management Planner Refresher Course

Expiration: 7/27/2024

7/27/2023 Training Date AMPR0727230007N35357

Certificate No.

Darla Beery AHERA Building Inspector Certification





Geotechnical Engineering Construction Inspection Materials Testing Environmental

Office Locations

Orange County Corporate Branch

2992 E. La Palma Avenue Suite A

Anaheim, CA 92806

Tel: 714.632.2999 Fax: 714.632.2974

San Diego Imperial County

7742 Arjons Drive

San Diego, CA 92126

Tel: 858.537.3999 Fax: 858.537.3990

Inland Empire

14467 Meridian Pkwy. Building 2A Riverside, CA 92553

Tel: 951.653.4999 Fax: 951.653.4666

Central Dispatch

888.844.5060

www.mtalinc.com

Mr. Scott Battles June 21, 2024

Vanir Construction Management, Inc. 4540 Duckhorn Drive, Suite 300 Sacramento, CA 95834

Subject: Addendum to Asbestos Survey Report: Orange County Juvenile Hall

Building 4

Dated April 22, 2024

Re: Orange County Juvenile Hall-Building 4-Roof Inspection

331 The City Drive, S Orange, California 92868

Dear Mr. Battles:

On June 6, 2024, MTGL conducted an inspection of suspect roofing materials that were noted to be inaccessible in the Asbestos Survey Report, dated April 22, 2024. Michelle Ehresman, an AHERA Building Inspector (#ABIR0727230010N35227) and Certified Asbestos Consultant (#14-5323) collected a total of six (6) bulk samples and submitted the material to Eurofins EMLab P&K, San Diego, California for analysis and evaluation of asbestos content using EPA Method 600/R-93/116, Polarized Light Microscopy.

The material was in good condition at the time of the inspection.

SUMMARY OF SAMPLING & ANALYTIC RESULTS. The following table summarizes the laboratory's analytical results:

Asbestos:

Sample ID	Sample Matrix	Analytic Result*						
1, 2, 3	Vinyl Capped Roof (Multi-layer)	Roof	No Asbestos Detected					
4, 5, 6	Roof Mastic	Roof	No Asbestos Detected					

GENERAL INFORMATION

Environmental Protection Agency (EPA)

According to the South Coast Air Quality Management District's Rule 1402 paragraph (H)(2)(C), the analysis of composite samples of multi-layered material including, but not limited to, stucco (base and scratch coat) and wall systems is prohibited for the quantification of asbestos content. All separable layers shall be analyzed and reported separately for asbestos content.

These materials are eligible for analyzed using 1,000 Point Count with Gravimetric Reduction methods. Analysis would be conducted per strata and materials found to be greater than 0.1% asbestos are regulated by OSHA and handled as asbestos containing until packaged and stored for disposal. Materials greater than 1% are regulated by EPA/APCD and would require disposal as asbestos containing material.

A material is considered by the EPA and the State of California to be asbestos-containing if at least one sample collected from the area shows asbestos present in an amount greater than one percent (> 1%).

California Occupational Safety & Health Agency (Cal/OSHA)

Title 8, California Code of Regulation 1529 defines asbestos-containing construction materials as materials containing greater than one-tenth of one percent (0.1%) asbestos by weight. Under this code, materials containing between 0.1% and 1% asbestos are regulated as other regulated operations. Although operations involving materials containing between 0.1% and 1% asbestos are not considered Class I, II, or III work, several sections of the standard are applicable, including negative exposure assessments and the use of regulated areas.

Laboratory analysis may report materials as "Trace Asbestos". These materials are assumed to be greater than 0.1%. Upon client request, these materials can be analyzed using 1,000 Point Count with Gravimetric Reduction methods. Materials found to be greater than 0.1% asbestos are regulated by OSHA and handled as asbestos containing until packaged and stored for disposal.

Please refer to the laboratory analysis for a more detailed description of the microscopic analysis of these samples.

Asbestos-containing materials (ACM) are regulated by federal, state, and local agencies, which include but may not be limited to the following:

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) requires an inspection for asbestos be done on facilities that are to undergo demolition or renovation work. Materials found to contain asbestos may need to be removed prior to the start of such demolition/renovation work.

NESHAP defines Category I non-friable asbestos-containing materials as gaskets, resilient floor covering, and asphalt roofing products that contain more than one percent asbestos, and Category II non-friable as any materials, except for Category I non-friable, that contain more than one percent asbestos and cannot be reduced to a powder by hand pressure when dry. NESHAP defines a Regulated Asbestos-Containing Material (RACM) as: (a) friable ACM, (b) Category I non-friable that has become friable, (c) Category I non-friable that has or may be subject to sanding, grinding, cutting, or abrading, and (d) Category II non-friable that may or has become friable during demolition or renovation.

CONCLUSIONS

The roofing materials and pipe coating material observed and tested for asbestos was negative for asbestos content.

RECOMMENDATIONS

If during renovation activities, materials other than the ones discussed in this report are observed, the materials should be tested for asbestos content prior to disturbance.

INVESTIGATION LIMITATIONS

MTGL, Inc. did not conduct testing within interstitial wall cavities, ceiling plenums, HVAC ventilation systems or crawlspaces or other locations of the facility, outside of the Client specified areas.

The findings of this report are valid as of the date of the survey and sample collection. Changes in the condition of the property can occur with passage of time, whether they are due to natural processes or the works of man on this or adjacent properties. In addition, changes in the state-of-art technology and/or government codes may occur. Due to such changes, the findings of this report may be invalidated wholly or in part by conditions beyond our control. Due to changes that can occur over time, submittals of this report to Regulatory Agencies may require additional site visits and assessment to document current conditions.

The final assessment of the potential for the existence of hazardous contaminants at the site should be considered a professional opinion based on the data obtained during the investigation and should not be considered a definitive statement that a hazardous contaminant or conditions are, or is not, present in the area of study. These opinions have been derived in accordance with current standards of practice.

This report is intended solely for use by the parties to whom it is addressed. This report is not intended for and may not contain sufficient information for purposes other than qualitative evaluation of asbestos or conditions at the time of our evaluation. Reliance on this report for other purposes or by other parties shall be at the user's sole risk.

WARRANTY

MTGL, Inc. warrants that the findings contained herein have been prepared with the level of care and skill exercised by experienced and knowledgeable environmental consultants who are appropriately licensed or otherwise trained to perform asbestos inspections and assessments pursuant to the scope of work required on this project. MTGL's Asbestos Survey Reports are prepared by trained certified professionals without a conflict of interest in the demolition(s) or renovation project(s) as per the Business and Professions Code 7180 (BP7180).

MTGL, Inc. warrants that the findings contained herein have been prepared in general accordance with accepted professional practices as applied by similar professionals in the community at the time of its preparation. Changes in the state of the art or in applicable regulations cannot be anticipated and have not been addressed in this report.

The survey included inspection of visible and accessible materials. MTGL did not inspect or sample inaccessible areas and did not dismantle any part of the structure to survey inaccessible areas. For the purpose of this warranty, inaccessible is defined as areas that could not be tested (sampled) without destruction of the structure or a portion of the structure. Inaccessible materials that are visible to MTGL's inspectors shall be assumed to be asbestos containing. No other warranty is expressed, or implied.

MTGL, Inc. appreciates the opportunity to be of service. If you have any questions or require additional information, please contact us at (858) 537-3999.

Sincerely, MTGL, INC

Michelle Ehresman, CAC 14-5323 Industrial Hygiene Services

Attachments:

Attachment 1: Laboratory Report and Chain of Custody
Attachment 2: Sample Location Map
Attachment 3: Inspector Certifications

Attachment 1

Laboratory Report Chain of Custody



Report for:

Mr. Carl Tucker MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126

Regarding: Eurofins EPK Built Environment Testing, LLC Project: VANIR-OC Juvenile Hall; Bldg. 4 - Roof

EMĹ ID: 3669869

Approved by:

Dates of Analysis: Asbestos PLM: 06-12-2024

Approved Signatory Carlos Rivadeneyra

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267) NVLAP Lab Code 500034-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Eurofins EPK Built Environment Testing, LLC

9445 Farnham Street, Suite 103, San Diego, CA 92123 (833) 465-5857 www.eurofinsus.com/Built

Date of Sampling: 06-06-2024

Client: MTGL, Inc. Date of Receipt: 06-07-2024 C/O: Mr. Carl Tucker Re: VANIR-OC Juvenile Hall; Bldg. 4 - Roof Date of Report: 06-12-2024

ASBESTOS PLM REPORT

Total Samples Submitted: 6 **Total Samples Analyzed:** 6 **Total Samples with Layer Asbestos Content > 1%:** 0

Lab ID-Version 1: 17982592-1

Lab ID-Version 1: 17982593-1

EMLab ID: 3669869, Page 2 of 4

Location: 1, Vinyl Capped Roof

Sample Layers	Asbestos Content
White Semi-Fibrous Material	ND
Gray Non-Fibrous Material	ND
White Woven Material (Mesh)	ND
White Paint	ND
Yellow Foam	ND
Black Roofing Felt	ND
White Foam	ND
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity:	Poor

Location: 2, Vinyl Capped Roof

Sample Layers	Asbestos Content
White Woven Material (Mesh)	ND
White Paint	ND
Black Roofing Felt 2	ND
Black Roofing Felt 1	ND
White Foam	ND
Yellow Paint	ND
White Semi-Fibrous Material	ND
Gray Non-Fibrous Material	ND
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity:	Poor

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

 \ddagger A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Eurofins EPK Built Environment Testing, LLC

EMLab ID: 3669869, Page 3 of 4

9445 Farnham Street, Suite 103, San Diego, CA 92123 (833) 465-5857 www.eurofinsus.com/Built

Client: MTGL, Inc.

C/O: Mr. Carl Tucker

Re: VANIR-OC Juvenile Hall; Bldg. 4 - Roof

Date of Sampling: 06-06-2024

Date of Receipt: 06-07-2024

Date of Report: 06-12-2024

ASBESTOS PLM REPORT

Location: 3, Vinyl Capped Roof

Lab ID-Version: 17982594-1

Sample Layers	Asbestos Content
Brown Paper 2	ND
White Foam	ND
Brown Paper 1	ND
Yellow Foam	ND
Black Roofing Felt 2	ND
Black Roofing Felt 1	ND
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity:	Poor

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Eurofins EPK Built Environment Testing, LLC

9445 Farnham Street, Suite 103, San Diego, CA 92123

(833) 465-5857 www.eurofinsus.com/Built

EMLab ID: 3669869, Page 4 of 4

Client: MTGL, Inc. Date of Sampling: 06-06-2024 Date of Receipt: 06-07-2024 C/O: Mr. Carl Tucker Re: VANIR-OC Juvenile Hall; Bldg. 4 - Roof Date of Report: 06-12-2024

ASBESTOS PLM REPORT

Location: 4, Mastic Lab ID-Version‡: 17982595-1

Sample Layers	Asbestos Content
White Mastic	ND
Gray Paint	ND
White Woven Material (Mesh)	ND
Black/White Mastic	ND
Composite Non-Asbestos Content:	5% Synthetic Fibers
Sample Composite Homogeneity:	Poor

Location: 5, Mastic Lab ID-Version : 17982596-1

Sample Layers	Asbestos Content
White Mastic	ND
Gray Paint	ND
Black/White Mastic	ND
Sample Composite Homogeneity:	Poor

Location: 6, Mastic Lab ID-Version : 17982597-1

Sample Layers	Asbestos Content				
White Mastic	ND				
Gray Paint	ND				
White Woven Material (Mesh)	ND				
Black Mastic	ND				
Composite Non-Asbestos Content:	5% Synthetic Fibers				
Sample Composite Homogeneity:	Poor				
Sumple Composite Homogeneity.	1 001				

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

 \ddagger A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

CHAIN OF CUSTODY 💸 eurofins

www.eurofinsus.com/Built

East: (866) 871-1984 Central: (800) 651-4802 **Built Environment Testing**

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Ü	Light				-	
E I	Moderate					
170	Heavy		777			

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NP - Non-potable Water	P - Potable Water	D - Dust		1 . 1		5200														

United States Department of Commerce National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 500034-0

Eurofins EMLab P&K

San Diego, CA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2024-01-01 through 2024-12-31

Effective Dates



For the National Voluntary Laboratory Accreditation Program



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Eurofins EMLab P&K

9445 Farnham St #103 San Diego, CA 92123 Quynh Nguyen Phone: 800-651-4802

Email: quynh.nguyen@et.eurofinsus.com https://www.eurofinsus.com/environment-testing/

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 500034-0

Bulk Asbestos Analysis

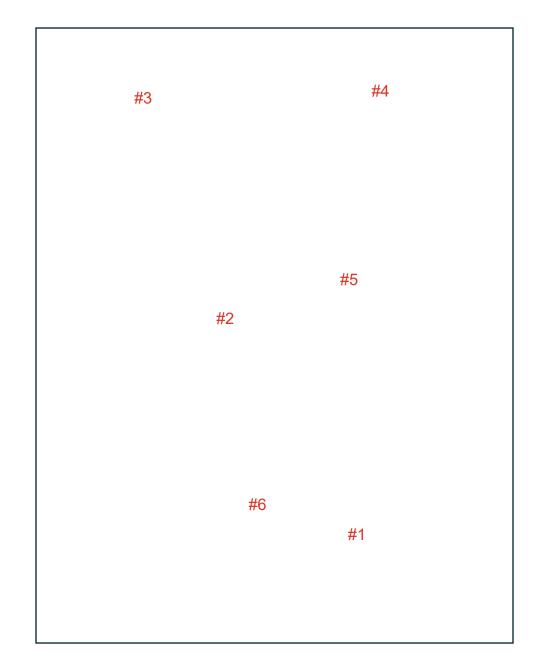
<u>Code</u>	<u>Description</u>
18/A01	EPA 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

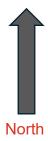
For the National Voluntary Laboratory Accreditation Program

APPENDIX 2

SAMPLE LOCATION MAP (NOT TO SCALE)

Building 4 Roof





APPENDIX 3 INSPECTOR CERTIFICATIONS

California Certified Asbestos Consultant (CAC)

Card Holder: <u>Michelle Ehresman</u>

Certification Number: <u>14-5323</u> Exp.: <u>11/19/2024</u>

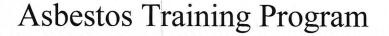
Current Employer: MTGL, Inc.

Supporting Certifications:

AHERA Contractor/Supervisor Refresher Certification
 AHERA Building Inspector Refresher Certification
 AHERA Management Planner Refresher Certification
 AHERA Project Designer Refresher Certification
 Exp. 7/27/2024
 Exp. 7/27/2024
 Exp. 8/16/2024



MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126 858-537-3999



This is to certify

Michelle Ehresman 1656

Has successfully completed 8 hours of formal training required by section 206 of TSCA II entitled

Contractor/Supervisor Refresher

Presented By

Environmental Compliance Training PO BOX 16555 San Diego, CA. 92176-6555 (858) 558-7465

Director:

Walter T. Amenta, CIH, Approval Number CA-029-04

Class Dates:

06-24-2023

Exam Date:

n/a

Expiration Date: 06-24-2024

Certification Number: 0623ABCA167303

Asbestos Building Inspector Refresher Course

DOSH #: CA-015-06

Michelle Ehresman

ABIR0727230010N35227

David Wallach

Principal Instructor

7/27/2023

Course Start Date

7/27/2023

Course End Date

Michael W. Horner
Training Director

7/27/2023 Exam Date

7/27/2024

Expiration Date

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



NATEC International, Inc.

National Association of Training and Environmental Consulting



1100 Technology Circle, Suite A, Anaheim, CA 92805 · www.natecintl.com · 800-969-3228

Important Industry Contacts

CAL-OSHA: Ph# (916) 574-2993

(916) 483-0572 Fax Notification Web: www.dir.ca.gov or calosha.com

CDPH/CLPPB:Ph# (510) 620-5600

Web: www.cdph.ca.gov/programs/CLPPB

SCAQMD:

Ph# (909) 396-3739 Fax#(909) 396-3342

BAAQMD:

Ph# (415) 749-4762

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PO Box 8657, Fountain Valley, CA 92728 (714) 678-2750, (800) 969-3228, Fax (714) 678-2757 www.natecintl.com

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National Association of Training and Environmental Consulting
*Note: Card is not suitable substitute for certificate and is not accepted by SCAQMD as proof of
certification

This Court A bus south a large The Large Training

This Card Acknowledges That Michelle Ehresman

Holds Training Certification For Asbestos Building Inspector Refresher Course

Expiration: 7/27/2024

Training Date 7/27/2023
ABIR0727230010N35227

Asbestos Project Designer Refresher Course

DOSH #:CA-015-10

Michelle Ehresman

APDR0816230004N35415

Norm Kramer

Principal Instructor

8/16/2023

0/10/2023

Course Start Date

8/16/2023

Course End Date

8/16/2023

Exam Date

Michael W. Horner

Training Director

8/16/2024

Expiration Date

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



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SCAOMD:

Ph# (909) 396-3739 Fax#(909) 396-3342

BAAQMD:

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certification.

This Card Acknowledges That Michelle Ehresman

Holds Training Certification For Asbestos Project Designer Refresher Course

Expiration: 8/16/2024

ining Date 8/16/2023

APDR0816230004N35415

Asbestos Management Planner Refresher Course

DOSH #: CA-015-08

Michelle Ehresman

AMPR0727230007N35357

David Wallach

Principal Instructor

7/27/2023

7/27/2023

Michael W. Horner

Training Director

7/27/2024

7/27/2023 Course Start Date

Course End Date

Exam Date

Expiration Date

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



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This Card Acknowledges That Michelle Ehresman

Holds Training Certification For Asbestos Management Planner Refresher Course

Expiration: 7/27/2024

Training Date 7/27/2023

Certificate No.

AMPR0727230007N35357

LEAD-BASED PAINT INSPECTION REPORT

Juvenile Hall-Building 4 331 The City Drive, S Orange, California 92868

Prepared for:

Vanir Construction 4540 Duckhorn Drive, Suite 300 Sacramento, California 95834

Prepared by:

MTGL, Inc. 7742 Arjons Drive San Diego, California 92126 858-537-3999

Project Number:

SDPE-24-061.1CT

Michelle Ehresman, CAC, LIA/LPM, ICRA Certification Number: CDPH# 0458/0459

Report Issuance Date: April 27, 2024

TABLE OF CONTENTS

SECTION

INTRODUCTION	1
General Information Authorization	
Performance	
WARRANTY	2
METHODOLOGY	3
General References Lead Sampling Procedures Performance Characteristic Sheets	
SUMMARY of FINDINGS	4
Lead-Based Paint Summary	
HAZARD CONTROL AND ABATEMENT OPTIONS &LEAD SAFE WORK PRACTICES	5
LEAD BASED PAINT DISCLOSURE	6
APPENDICES	7
Appendix 1 –XRF Data Report and Performance Characteristic Sheet	
Appendix 2 – Site Drawing	
Appendix 3 – Glossary	
Appendix 4 – Inspector Certification	
Appendix 5 – CDPH 8552 Form	
Appendix 6 – Renovate Right	

GENERAL INFORMATION

MTGL was retained by Vanir Construction to conduct a lead-based paint inspection at the subject property located at 331 The City Drive in Orange, California 92868. All inspections were in accordance with the guidelines set forth in the U.S. Department of Housing and Urban Development. This document is prepared for the sole use of Vanir Construction and/or any Regulatory or Governmental agencies that may directly become involved with this project.

MTGL's scope of work was limited to the following Client specified locations at the property:

• Building 4 (Single story, wood frame with concrete on a concrete slab.)

MTGL was informed the building has been fully renovated in recent years.

PURPOSE

The purpose of this inspection is to identify and assess painted components at the subject location above specified regulatory action levels within the Client specified scope of work.

AUTHORIZATION

Authorization to perform the survey was given by Mr. Scott Battles with a notice to proceed via proposal SDPE-24-061.1CT.

PERFORMANCE

All visual inspections and component testing was performed in accordance with Federal, State and local requirements. The inspection was performed by Michelle Ehresman, a California Certified Lead Inspector/Assessor on March 28, 2024.

1

LEAD-BASED PAINT SURVEY

MTGL, Inc. warrants that the findings contained herein have been prepared with the level of care and skill exercised by experienced and knowledgeable environmental consultants who are appropriately licensed or otherwise trained to perform lead-based paint assessments pursuant to the scope of work required on this project.

MTGL, Inc. warrants that the findings contained herein have been prepared in general accordance with accepted professional practices as applied by similar professionals in the community at the time of its preparation. Changes in the state of the art or in applicable regulations cannot be anticipated and have not been addressed in this report.

The survey included the inspection of accessible materials only. MTGL did not inspect or sample inaccessible areas such as behind walls or within ductwork and did not dismantle any part of the structure to survey inaccessible areas. For the purpose of this warranty, inaccessible is defined as areas of the building that could not be tested (sampled) without destruction of the structure or a portion of the structure. Inaccessible materials that are visible to MTGL inspectors shall be assumed to be lead-based paint coated.

It is the owner's legal obligation to disclose the inspection results to tenants and/or purchasers before obligation under 24 CFR part 35 and 40 CFR part 745 (published in the Federal Register, Volume 61, Number 45, March 6, 1996, starting on P. 9064; copies of the regulations and related materials can be obtained from the National Lead Information Center Clearinghouse, (1-800-424-LEAD)

GENERAL REFERENCES

LEAD-BASED PAINT

Lead-based paint testing was conducted in accordance with the Title 17, California Code of Regulations, Division 1, Chapter 8, Accreditation, Certification and Work Practices in Lead-Related Construction, Section 36000 and the United States Department of Housing and Urban Developments *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, Chapter 7 Lead-Based Paint Inspections*, as published in June 1995 and revised in 1997.

The State of California, HUD and the EPA currently define lead-based paint as paints or other surface coatings, which contain lead equal to or greater than 1.0 milligrams of lead per square centimeter of surface area (mg/cm²), or equal to or greater than 0.5% by weight.

Lead-based paint testing was conducted using portable x-ray fluorescence (XRF) spectrum analyzer, Model Niton XLP 300, Manufactured by Niton, Inc. The Niton XLP 300 is calibrated to measure the K-shell x-ray emissions of lead. The K-shell is normally used for paint analysis because it measures lead in all layers of paint films, including the lower layers where higher concentrations of lead are usually found. An initial calibration and ending calibration is validated each day with a laminated Lead Paint Standards testing card which is provided by the manufacturer. The card is a direct comparison to the paint standard to NIST kit SRM2579a with a spectrum analyzer. If an instrument does not maintain consistent calibrations after following the manufacturer's recommendation, the unit is removed from the site and sent back to the manufacturer for service.

In the instance where paint chip samples are collected, sample collections are conducted by the requirements of the American Society of Testing and Materials standard E 1729, Standard Practice for Field Collection of Dried Paint Samples for Lead Determination by Atomic Spectrometry Techniques and HUD Guidelines.

Performance Characteristic Sheet (PCS)

Performance Characteristic Sheets for most XRF models can be found on the U.S. Department of Housing and Urban Developments Office of Healthy Homes and Lead Hazard Control website, specifically HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.(http://www.hud.gov/offices/lead/lbp/hudguidelines/index.cfm).Operating specification and procedures for the XRF used for this survey can be downloaded at the website above. PCS's can also be obtained by calling toll free to the National Lead Information Clearinghouse, at 800-424-LEAD. Persons with hearing or speech impediments may access the above number via TTY by calling the Federal Information Relay Service at 800-887-8339, toll free.

GENERAL SUMMARY

Lead-Based Paint Inspection Results

The purpose of the lead-based paint survey was to evaluate the referenced facility's painted components that may contain lead-based paint. Suspect components identified during the survey included but not limited to the following:

- Interior: Door and Window Components, Wall, Floor and Ceilings
- Exterior: Wall, Windows and Doors

The following is a summary of lead based painted components identified that contain lead greater than 1.0 mg/cm² or greater * (Please see attachment I for a detail report of findings.)

• No lead-based paint or lead containing components were identified.

*MTGL, Inc. is not responsible for actual quantity of the material(s). MTGL recommends bidding contractors to calculate quantities for estimated abatement costs. When evaluating this report, it is assumed that according to Chapter 7 HUD guidelines, that if one testing combination (i.e. window, door) is positive for lead in an interior or exterior room equivalent, that all other similar testing combinations in those areas are assumed to be positive.

When evaluating this report, it is assumed that according to Chapter 7 HUD guidelines, that if one testing combination (i.e. window, door) is positive for lead in an interior or exterior room equivalent, that all other similar testing combinations in those areas are assumed to be positive.

Current EPA and Cal/EPA regulations do not require lead-based paint to be removed prior to demolition, unless found to be loose and peeling. Provided that paints are securely adhered to the substrates, deposal of the debris can be handled in California as non-hazardous and non-RCRA waste, pending characterization of the waste.

Loose and peeling paints or other wastes exceeding the Total Threshold Level Concentration (TTLC) of 1,000 ppm ($\mu g/g$) would be required to be disposed of as non-RCRA hazardous waste. However, if the leachable lead contents of the wasted exceed the Soluble Threshold Level Concentrations (STLC) of 5 mg/liter, the wastes must be disposed of as RCRA waste.

Several government agencies have definitions for what amount of lead constitutes paint to be considered "lead-based". The Department of Housing and Urban Development (HUD) has designated the amount to be 1.0 mg/cm², 0.5% by weight or 5000 ppm (parts per million). The HUD regulations are related to potential hazards in the home environment and not to construction activities. The amount designated for high contact play areas is 400 ppm.

Lead Safe Work Practice Requirements for Maintenance, Renovation or Remodeling

EPA's RRP Rule requires anyone (remodeling, renovation and painting contractors and most other trades) who works in pre-1978 housing for compensation and who might disturb painted surfaces to become an EPA Certified Renovator by taking an 8-hour RRP "Lead Safe Work Practices" class from an EPA accredited training provider. The initial certification is good for five (5) years. To "renew" contractors must take a 4-hour RRP Refresher class before their initial certification expires. The RRP rule applies to anyone who works for compensation in pre-1978 housing and/or child-occupied facilities who might disturb painted surfaces, including:

- General contractors
- Demolition workers
- Remodeling contractors
- Maintenance workers in multi-family housing
- Painters, plumbers and most specialty trades.

The RRP rule covers a lot of jobs: renovation, remodeling, painting, window replacement, plumbing, electrical work, heating & air-conditioning, demolition, plus work performed by trades like carpenters, electricians and handymen. The rule also applies to persons working for rental property owners, schools, and day care providers. And, it applies to non-profits and governmental agencies. The RRP Rule requires that "Lead Safe Work Practices" be used when disturbing more than 6 square feet per room or 20 square feet outside.

It shall be noted that California's lead-based paint regulations cover ALL pre-78 structures that have not been tested - not just Target Housing and Child-Occupied Facilities. (Title 17, CCR, Div 1, Ch 8). Since 2003, California law (Title 17) has required that "Lead Safe Work Practices" be used in ALL pre-1978 structures when disturbing any amount of known or "presumed" lead-based paint. Contractors may have taken additional training to meet State of California requirements for Lead-Related Construction and obtain the required California Department of Public Health-Lead Related Construction Certifications for permanent abatement. This certification supplements but does not replace the EPA RRP certification. CDPH State Certified Lead Abatement Supervisors and Workers must also become RRP certified, and abatement firms must also be RRP Certified if they do non-abatement jobs.

Contractors and renovators who work or compensation in pre-1978 housing and/or a child-occupied facility that will disturb painted surfaces greater than 6 square feet per room or 20 square feet outside must give Clients a pamphlet called "Renovate Right" and get a signed receipt before beginning a job. Contractors can call (800) 424-5323 and ask for free copies of "Renovate Right" and the "Small Entity Compliance Guide to Renovate Right" or both can be downloaded as PDF files from the EPA website.

The Consumer Product Safety Commission (CPSC) has defined lead-based paint as surface coatings containing lead concentrations greater than 90 ppm. All children's products, and some furniture, for adult and children, must not contain a concentration of lead greater than 0.009 percent (90 parts per million) in paint or any similar surface coatings. Household paint must also meet this

requirement. In 1978, the CPSC banned the sale of lead-based paint to consumers and the use of lead-based paint in residences and public buildings.

Please note that the detection of any amount of lead in a component will trigger numerous requirements from the California Occupations Safety and Health Administration (Cal-OSHA) lead in construction standard (e.g., Title 8, CCR Section 1532.1), even with common tasks such as drywall demolition, manual paint scraping, and manual paint sanding. The employer is required to conduct air sampling to determine the exposure to lead during these tasks and during other tasks that could result in lead exposure. Until actual exposures are determined, workers are required to wear respirators that are appropriate to the task. Detailed requirements are published in the Cal-OSHA standard for lead in construction.

All workers who may be exposed to lead must be trained in the hazards of lead. The results of air sampling are used to determine if workers are exposed to lead above the action level (AL) of 30 micrograms per cubic meter of air or above the permissible exposure limit (PEL) of 50 micrograms of lead per cubic meter of air, averaged over an 8-hour shift. Exposures above the AL or PEL will trigger additional requirements including engineering controls, proper housekeeping, washing facilities for hand and face washing, additional worker training, respiratory protection, medical monitoring, and additional air sampling. The employer must have a written compliance plan.

Lead Paint

Interim controls which are temporary measures may include the following:

- Paint Film Stabilization: "scrape off the loose and flakey paint and reapply with regular house paint".
- Friction (places that rub) and Impact (places that are bumped or banged) Surface Treatments (Doors, windows, cabinets, floors, etc): treated by covering the surfaces with an abrasion-resistant material, or by repairing to an intact working condition in order to minimize dust.
- Special Cleaning: reduction of lead hazard by cleaning up visible dust by HEPA vacuuming, washing and HEPA vacuuming again.

Interim controls typically last less than 20 years and will require the reevaluation of components on a periodic basis.

As of April 22, 2010, the EPA passed the Renovator, Repair and Paint Rule (RRP) (40 CFR Part 745.90) which states all renovation and painting contractors and other trades who work in pre-1978 housing and who might disturb painted surfaces must become Lead Certified Renovators by taking a one-day course about using "Lead Safe Work Practices" on the job.

Abatement methods which eliminate or put a barrier in front of lead hazards may include the following:

- Encapsulation: covering lead paint with a special liquid or thick coating (not regular paint). Works well on surfaces that are in good condition and should not be used on friction or impact surfaces.
- Enclosure: covering lead paint with a solid, dust-tight barrier that is usually mechanically attached (sheetrock, paneling, drywall).
- Replacement: removal of lead covered components (doors, windows, molding) and replacing with lead free components.
- Removal: recommended when other options may not be feasible; removal of lead paint by means of heat guns, scraping and sanding, power tools, chemical stripping and/or use of abrasives and hydro blasting.

Abatement controls typically last more than 20 years. Abatement methods that will result in the smallest amount of dust generated are preferred. Workers who partake in the above abatement methods should be California State Certified Lead Supervisors and Workers. Clearance sampling after abatement must be conducted by a certified lead-based paint inspector

Lead Safe Work Practice Requirements for Maintenance, Renovation or Remodeling

Lead-based paint, deteriorated paint or lead-based hazards require lead safe work practices. These practices are necessary for regular lead based paint hazard controls, repair, remodeling, renovation or other work activities that may disturb lead based paint above HUD's de minimis levels. HUD describes de minimus levels as follows:

- 20 square feet on exterior surfaces
- 2 square feet in any one interior room or space
- 10% of a type of building component with a small surface area (such as painted windowsills) on interior or exterior surfaces

Workers who may disturb lead-based paint above the de minimis level during repair, renovation or maintenance activities or any other work efforts that disturbs a known or assumed lead-based paint above HUD's de minimis shall be trained in lead safe work practices.

Firms providing abatement services must be certified as an abatement firm by the EPA or the State. Workers conducting abatement must be trained and certified as abatement workers by a training provider accredited by the EPA or State.

SECTION 6 DISCLOSURE

A copy of this summary must be provided to new lessees (tenants) and purchasers of this property under Federal Law (24 CFR part 35 and 40 CFR part 745) before they become obligated under a lease or sales contract. The complete report must also be provided to new purchasers and it must be made available to new tenants. Landlords (lessors) and sellers are also required to distribute an educational pamphlet and include standard warning language in their leases or sales contracts to ensure that parents have the information they need to protect their children from lead-based paint hazards.

It is the owner's legal obligation to disclose the inspection results to tenants and/or purchasers before obligation under 24 CFR part 35 and 40 CFR part 745 (published in the Federal Register, Volume 61, Number 45, March 6, 1996, starting on P. 9064; copies of the regulations and related materials can be obtained from the National Lead Information Center Clearinghouse, (1-800-424-LEAD).

SECTION 7 Appendices

Appendix 1

XRF Data Sheet

and

Performance Characteristic Sheet (PCS)

Performance Characteristic Sheet

EFFECTIVE DATE: September 24, 2004 EDITION NO.: 1

MANUFACTURER AND MODEL:

Make: Niton LLC
Tested Model: XLp 300
Source: 109Cd

Note: This PCS is also applicable to the equivalent model variations indicated

below, for the Lead-in-Paint K+L variable reading time mode, in the XLi and

XLp series:

XLi 300A, XLi 301A, XLi 302A and XLi 303A. XLp 300A, XLp 301A, XLp 302A and XLp 303A. XLi 700A, XLi 701A, XLi 702A and XLi 703A. XLp 700A, XLp 701A, XLp 702A, and XLp 703A.

Note: The XLi and XLp versions refer to the shape of the handle part of the instrument. The differences in the model numbers reflect other modes available, in addition to Lead-in-Paint modes. The manufacturer states that specifications for these instruments are identical for the source, detector, and detector electronics relative to the Lead-in-Paint mode.

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

Lead-in-Paint K+L variable reading time mode.

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm² (inclusive)

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm² in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm² film).

If readings are outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instruments into control before XRF testing proceeds.

SUBSTRATE CORRECTION:

For XRF results using Lead-in-Paint K+L variable reading time mode, substrate correction is <u>not</u> needed for: Brick, Concrete, Drywall, Metal, Plaster, and Wood

INCONCLUSIVE RANGE OR THRESHOLD:

K+L MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm²)
Results not corrected for substrate bias on any	Brick	1.0
substrate	Concrete	1.0
	Drywall	1.0
	Metal	1.0
	Plaster	1.0
	Wood	1.0

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* ("HUD Guidelines"). Performance parameters shown on this sheet are calculated from the EPA/HUD evaluation using archived building components. Testing was conducted in August 2004 on 133 testing combinations. The instruments that were used to perform the testing had new sources; one instrument's was installed in November 2003 with 40 mCi initial strength, and the other's was installed June 2004 with 40 mCi initial strength.

OPERATING PARAMETERS:

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

SUBSTRATE CORRECTION VALUE COMPUTATION:

Substrate correction is not needed for brick, concrete, drywall, metal, plaster or wood when using Lead-in-Paint K+L variable reading time mode, the normal operating mode for these instruments. If substrate correction is desired, refer to Chapter 7 of the HUD Guidelines for guidance on correcting XRF results for substrate bias.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing. Use the K+L variable time mode readings.

Conduct XRF retesting at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below.

Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family housing a result is defined as the average of three readings. In multifamily housing, a result is a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF results.

Compute the average of all ten re-test XRF results.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

TESTING TIMES:

For the Lead-in-Paint K+L variable reading time mode, the instrument continues to read until it is moved away from the testing surface, terminated by the user, or the instrument software indicates the reading is complete. The following table provides testing time information for this testing mode. The times have been adjusted for source decay, normalized to the initial source strengths as noted above. Source strength and type of substrate will affect actual testing times. At the time of testing, the instruments had source strengths of 26.6 and 36.6 mCi.

Testing Times Using K+L Reading Mode (Seconds)								
	All Data		Median for laboratory-measured lead levels (mg/cm²)					
Substrate	25 th Percentile	Median	75 th Percentile	Pb < 0.25	0.25 <u><</u> Pb<1.0	1.0 <u><</u> Pb		
Wood Drywall	4	11	19	11	15	11		
Metal	4	12	18	9	12	14		
Brick Concrete Plaster	8	16	22	15	18	16		

CLASSIFICATION RESULTS:

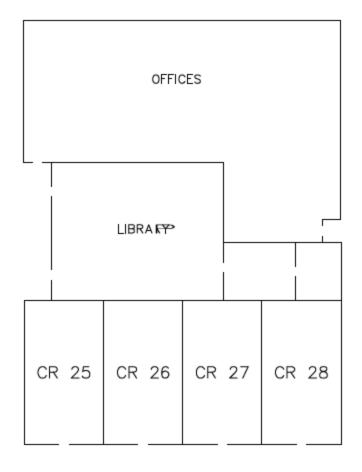
XRF results are classified as positive if they are greater than or equal to the threshold, and negative if they are less than the threshold.

DOCUMENTATION:

A document titled *Methodology for XRF Performance Characteristic Sheets* provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. For a copy of this document call the National Lead Information Center Clearinghouse at 1-800-424-LEAD.

This XRF Performance Characteristic Sheet was developed by the Midwest Research Institute (MRI) and QuanTech, Inc., under a contract between MRI and the XRF manufacturer. HUD has determined that the information provided here is acceptable when used as guidance in conjunction with Chapter 7, Lead-Based Paint Inspection, of HUD's *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*.

APPENDIX 2 SITE DRAWING



Building 4

(No lead based paint or lead containing components reported.)

Appendix 3

Glossary





Glossary

AALA: American Association for Laboratory Accreditation. Also known as A2LA.

Abatement: A measure or set of measures designed to permanently eliminate lead-based paint hazards or lead-based paint. Abatement strategies include the removal of lead-based paint, enclosure, encapsulation, replacement of building components coated with lead-based paint, removal of lead-contaminated dust, and removal of lead-contaminated soil or overlaying of soil with a durable covering such as asphalt (grass and sod are considered interim control measures). All of these strategies require preparation; cleanup; waste disposal; postabatement clearance testing; recordkeeping; and, if applicable, monitoring. See also Complete abatement and Interim controls.

Abrasion resistance: Resistance of the paint to wear by rubbing or friction; related to both toughness and gloss.

Accessible surface: Any protruding interior or exterior surface, such as an interior window sill, that a young child can mouth or chew.

Accreditation: A formal recognition that an organization, such as a laboratory, is competent to carry out specific tasks or types of tests.

Accredited laboratory: A laboratory that has been evaluated and approved by the National Lead Laboratory Accreditation Program (NLLAP), to perform lead measurement or analysis, usually over a specified period of time.

Accredited training provider: A training provider who meets the standards established by EPA for the training of risk assessors, inspectors, lead-based paint hazard control contractors, and workers.

Accuracy: The degree of agreement between an observed value and an accepted reference value (a "true" value); a data quality indicator. Accuracy includes a combination of random errors (precision) and systematic errors (bias) due to sampling and analysis.

Acrylic: A synthetic resin used in highperformance waterborne coatings; a coating whose binder contains acrylic resins.

Adhesion: The ability of dry paint or other coating to attach to a surface and remain fixed on it without blistering, flaking, cracking, or being susceptible to removal by tape.

Administrative removal: The temporary removal of workers from the job to prevent the concentration of lead in their blood from reaching levels requiring medical removal.

AIHA: American Industrial Hygiene Association.

ALC: See Apparent Lead Concentration.

Aliquot: See Subsample.

Alkali: A chemical, such as lye, soda, lime, etc., that will neutralize an acid. Oil paint films can be destroyed by alkalies. Some paint removal products contain alkaline substances.

Alkyd: Synthetic resin modified with oil; coating that contains alkyd resins in the binder.

Apparent Lead Concentration (ALC): The x-ray fluorescence (XRF) reading or average of more than one reading on a painted surface. See also XRF analyzer, Substrate Equivalent Lead (SEL), and Corrected Lead Concentration (CLC).

Bare soil: Soil not covered with grass, sod, some other similar vegetation, or paving, including the sand in sandboxes.





Bias: A systematic error in the measurement process. For XRF readings, one source of bias is the substrate effect. See also Substrate effect and XRF analyzer.

Biennial report (for hazardous waste): A report (EPA Form 8700–13A) submitted by generators of hazardous waste to the EPA Regional Administrator. The report is due on March 1 of even-numbered years. The report includes information on the generator's activities during the previous calendar year. The owners and operators of treatment, storage, and disposal facilities must also prepare and submit biennial reports using EPA Form 8700–1313.

Binder: Solid ingredients in a coating that hold the pigment particles in suspension and bind them to the substrate. Binders used in paints and coatings include oil, alkyd, acrylic, latex, and epoxy. The nature and amount of binder determines many of the coating's performance properties—washability, toughness, adhesion, gloss, etc. See also Pigment.

Biological monitoring: The analysis of blood, urine, or both to determine the level of lead contamination in the body. Blood lead levels are expressed in micrograms of lead per deciliter (one-tenth of a liter) of blood, or $\mu g/dL$. They are also expressed in micromoles per liter ($\mu mol/L$).

Blank: A nonexposed sample of the medium being used for testing (i.e., wipe or filter) that is analyzed to determine if the medium has been contaminated with lead (e.g., at the factory or during transport).

Blind sample: A subsample submitted for analysis with a composition and identity known to the submitter but not to the analyst; used to test the analyst's or laboratory's proficiency in conducting measurements. See also Spiked sample.

Blood lead threshold: Any blood lead level greater than or equal to 10 $\mu g/dL$ as defined by the Centers for Disease Control and Prevention. See also Elevated Blood Lead level (EBL) child.

Building component: Any element of a building that may be painted or have dust on its surface, e.g. walls, stair treads, floors, railings, doors, window sills, etc.

Building component replacement: See Replacement.

Cementitious material: A material that is mixed with water, either with or without aggregate, to provide the plasticity, cohesion, and adhesion necessary for the placement and formation of a rigid mass (ASTM Standard C 11).

Centimeter: See cm.

Certification: The process of testing and evaluating against certain specifications the competence of a person, organization, or other entity in performing a function or service, usually for a specified period of time.

Certified: The designation for contractors who have completed training and other requirements to allow them to safely undertake risk assessments, inspections, or abatement work. Risk assessors, inspectors, and abatement contractors should be certified by the appropriate local, State or Federal agency.

Certified Industrial Hygienist (CIH): A person who has passed the 2-day certification exam of the American Board of Industrial Hygiene, and who has at least 4 years of experience in industrial hygiene and a graduate degree or a total of 5 years of experience. See also Industrial hygienist.

Certified reference material (CRM): Reference material that has at least one of its property values established by a technically valid procedure and is accompanied by or traceable to a certificate or other documentation issued by a certifying body. See also Standard reference material.

CFR: See Code of Federal Regulations.

Chalking: The photo-oxidation of paint binders—usually due to weathering—that causes a powder to form on the film surface.





Characteristics (of hazardous waste): EPA has identified four characteristics of hazardous waste: ignitability, corrosivity, reactivity, and toxicity (as determined by the TCLP test). Any solid waste that exhibits at least one of these characteristics may be classified as hazardous under the Resource Conservation and Recovery Act (RCRA), depending on how the waste is produced and what quantities are generated. See also Toxicity Characteristic Leaching Procedure (TCLP).

Chewable surface: See Chewed surface and Accessible surface.

Chewed surface: Any painted surface that shows evidence of having been chewed or mouthed by a young child. A chewed surface is usually a protruding, horizontal part of a building, such as an interior window sill. See also Accessible surface.

CLC: See Corrected Lead Concentration (CLC).

Cleaning: The process of using a HEPA vacuum and wet cleaning agents to remove leaded dust; the process includes the removal of bulk debris from the work area. OSHA prohibits the use of compressed air to clean lead-contaminated dust from a surface.

Clearance examination: Visual examination and collection of environmental samples by an inspector or risk assessor and analysis by an accredited laboratory upon completion of an abatement project, interim control intervention, or maintenance job that disturbs lead-based paint (or paint suspected of being lead-based). The clearance examination is performed to ensure that lead exposure levels do not exceed standards established by the EPA Administrator pursuant to Title IV of the Toxic Substances Control Act, and that any cleaning following such work adequately meets those standards.

Clearance examiner: A person who conducts clearance examinations following lead-based paint hazard control and cleanup work, usually a certified risk assessor or a certified inspector.

cm: Centimeter; 1/100 of a meter.

Code of Federal Regulations (CFR): The codification of the regulations of Federal agencies. The regulations are published in the Federal Register. See also Federal Register (FR).

Cohesion: Ability of a substance to adhere to itself; internal adhesion; the force holding a substance together.

Common area: A room or area that is accessible to all residents in a community (e.g., hallways or lobbies); in general, any area not kept locked.

Competent person: As defined in the OSHA Lead Construction Standard (29 CFR 1926.62), a person who is capable of identifying or predicting hazardous working conditions and work areas, and who has authorization to take prompt, corrective measures to eliminate the hazards. A competent person is not necessarily a risk assessor, inspector, or abatement project supervisor.

Complete abatement: Abatement of all lead-based paint inside and outside a dwelling or building and reduction of any lead-contaminated dust or soil hazards. All of these strategies require preparation; cleanup; waste disposal; postabatement clearance testing; recordkeeping; and, if applicable, reevaluation and on-going monitoring. See also Abatement.

Compliance plan: A document that describes the types of tasks, workers, protective measures, and tools and other materials that may be employed in lead-based paint hazard control to comply with the OSHA Lead Exposure in Construction standard.

Composite sample: A single sample made up of individual subsamples. Analysis of a composite sample produces the arithmetic mean of all subsamples.

Containment: A process to protect workers and the environment by controlling exposures to the lead-contaminated dust and debris created during abatement. See Worksite preparation level.





Contingency plan: A document that describes an organized, planned, and coordinated course of action to be taken during any event that threatens human health or the environment, such as a fire, explosion, or the release of hazardous waste or its constituents from a treatment, storage, or disposal facility.

Corrected Lead Concentration (CLC): The absolute difference between the Apparent Lead Concentration and the Substrate Equivalent Lead. See also Apparent Lead Concentration (ALC) and Substrate Equivalent Lead (SEL).

Detection limit: The minimum amount of a substance that can be reliably measured by a particular method.

Deteriorated lead-based paint: Any lead-based paint coating on a damaged or deteriorated surface or fixture, or any interior or exterior lead-based paint that is peeling, chipping, blistering, flaking, worn, chalking, alligatoring, cracking, or otherwise becoming separated from the substrate.

Digestion blank: A mixture of the reagents used for digesting of paint, soil, or dust matrixes but without the matrix. The blank undergoes all the steps of the analysis, starting with digestion. The blank is used to evaluate the contamination process from a laboratory.

Direct-reading XRF: An analyzer that provides the operator with a display of lead concentrations calculated from the lead K x ray intensity without a graphic of the spectrum usually in mg/cm² (milligrams of lead per square centimeter of painted surface area). See also XRF analyzer.

Disposal (of hazardous waste): The discharge, deposit, injection, dumping, spilling, leaking, or placement of solid or hazardous waste on land or in water so that none of its constituents can pollute the environment by being emitted into the air or discharged into a body of water, including groundwater.

Disposal facility: A facility or part of one in which hazardous waste is placed on land or in water to remain there after the facility closes.

Door mat: See Walk-off mat.

Dust removal: A form of interim control that involves initial cleaning followed by periodic monitoring and recleaning, as needed. Depending on the severity of lead-based paint hazards, dust removal may be the primary activity or just one element of a broader control effort.

Dust trap: A surface, component, or furnishing that serves as a reservoir where dust can accumulate.

EBL child: See Elevated Blood Lead level (EBL) child.

Efflorescence: The salt rising to the surface of a material, such as masonry, plaster, or cement, caused by the movement of water through the material. Paint or encapsulants may not adhere to a surface contaminated with efflorescence.

Elastomeric: A group of pliable, elastic liquid encapsulant coatings. An elastomer is a macromolecular material which, at room temperature, is capable of substantially recovering its size and shape after the force causing its deformation is removed (see ASTM D 907, D-14).

Elevated Blood Lead level (EBL) child: A child who has a blood lead level greater than or equal to 20 μg/dL or a persistent 15 μg/dL. See also Blood lead threshold.

Encapsulation: Any covering or coating that acts as a barrier between lead-based paint and the environment, the durability of which relies on adhesion and the integrity of the existing bonds between multiple layers of paint and between the paint and the substrate. See also Enclosure.

Enclosure: The use of rigid, durable construction materials that are mechanically fastened to the substrate to act as a barrier between the lead-based paint and the environment.





Engineering controls: Measures other than respiratory protection or administrative controls that are implemented at the work site to contain, control, and/or otherwise reduce exposure to lead-contaminated dust and debris usually in the occupational health setting. The measures include process and product substitution, isolation, and ventilation.

Epoxy paint: Paint based on an epoxy resin. An epoxy resin is a cross-linking resin the reactivity of which depends on the epoxide group.

Evaluation: Risk assessment, paint inspection, reevaluation, investigation, clearance examination, or risk assessment screen.

Examination: See Clearance examination.

Examiner: A person certified to conduct clearance examinations or reevaluations, usually a certified inspector or certified risk assessor.

Exposure monitoring: The sampling and analysis of air both inside and outside the work area to determine the degree of worker and resident exposure to lead or other airborne contaminants, often involving air sampling inside a worker's breathing zone.

Exterior work area: For lead hazard control work, the exterior work area includes any exterior building components, such as a porch or stairway; the safety perimeter; and access barriers.

Facility (pertaining to hazardous waste): All buildings, contiguous land, structures, and other appurtenances, as well as any improvements, where lead-based paint or hazardous waste is treated, stored, or disposed. A facility may consist of several different treatment, storage, or disposal units, such as landfills and surface impoundments.

Federal Register (FR): A daily Federal publication that contains proposed and final regulations, rules, and notices.

Fibermat: A semirigid woven material attached with a liquid adhesive to a surface or substrate.

Field blank: A clean sample of the matrix (e.g., filter, or wipe) that has been exposed to the sampling conditions; returned to the laboratory; and analyzed as an environmental sample. Clean quartz sand, air sampling filters and cassettes, and clean wipes can be used as field blanks. The field blank, which should be treated just like the sample, indicates possible sources of contamination.

FR: See Federal Register (FR).

Friction surface: Any interior or exterior surface, such as a window or stair tread, subject to abrasion or friction.

Generator: Any person whose act or operation produces hazardous waste identified or listed in 40 CFR Part 261 or whose act causes a hazardous waste to come under regulation (40 CFR 260.10).

Generator identification number: The unique number assigned by EPA to each generator; transporter of hazardous waste; and treatment, storage, or disposal facility.

Hazardous waste: As defined in EPA regulations (40 CFR 261.3), hazardous waste is solid waste or a combination of solid wastes that because of its quantity; concentration; or physical, chemical, or infectious characteristics may cause or significantly contribute to increases in mortality, serious and irreversible or incapacitating but reversible illnesses, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed. As defined in the regulations, solid waste is hazardous if it meets one of four conditions: (1) exhibits a characteristic of hazardous waste (40 CFR Sections 261.20 through 262.24); (2) has been listed as hazardous (40 CFR Section 261.31 through 261.33); (3) is a mixture containing a listed hazardous waste combined with a nonhazardous solid waste, unless the mixture is specifically excluded or no longer exhibits any of the characteristics of hazardous waste; and (4) is not excluded from regulation as hazardous waste. For lead-based paint abatement





waste, hazardous waste is waste that contains more than 5 ppm of leachable lead as determined by the TCLP test, or is waste that is corrosive, ignitable, or reactive and not otherwise excluded.

Hazardous Waste Manifest: See Manifest.

Heat gun: A device capable of heating leadbased paint causing it to separate from the substrate. For lead hazard control work, the heat stream leaving the gun should not exceed 1,100 °F (some authorities may use a different temperature).

HEPA filter: See High-Efficiency Particulate Air (HEPA) filter.

HEPA/wet wash/HEPA cycle: The cleaning cycle that begins with HEPA vacuuming, followed by a wet wash with a lead-specific cleaning agent, such as trisodium phosphate detergent or another liquid cleaning agent, followed by a final pass with a HEPA vacuum over the surface.

High-Efficiency Particulate Air (HEPA) filter: A filter capable of removing particles of 0.3 microns or larger from air at 99.97 percent or greater efficiency.

High phosphate detergent: See Trisodium phosphate (TSP) detergent.

Impact surface: An interior or exterior surface (such as surfaces on doors) subject to damage by repeated impact or contact.

Incinerator: An enclosed device using controlled flame combustion that neither meets the criteria for classification as a boiler nor is listed as an industrial furnace.

Industrial hygienist: A person having a college or university degree in engineering, chemistry, physics, medicine, or a related physical or biological science who, by virtue of special training, is qualified to anticipate, recognize, evaluate, and control environmental and occupational health hazards and the impact of those hazards on the community and workers.

In-place management: See Interim controls.

Inspection (of paint): A surface-by-surface investigation to determine the presence of lead-based paint (in some cases including dust and soil sampling) and a report of the results.

Inspector: An individual who has completed training from an accredited program and been licensed or certified by the appropriate State or local agency to (1) perform inspections to determine and report the presence of lead-based paint on a surface-by-surface basis through onsite testing, (2) report the findings of such an inspection, (3) collect environmental samples for laboratory analysis, (4) perform clearance testing, and (5) document successful compliance with lead-based paint hazard control requirements or standards.

Interim controls: A set of measures designed to temporarily reduce human exposure or possible exposure to lead-based paint hazards. Such measures include specialized cleaning, repairs, maintenance, painting, temporary containment, and management and resident education programs. Monitoring, conducted by owners, and reevaluations, conducted by professionals, are integral elements of interim control. Interim controls include dust removal; paint film stabilization; treatment of friction and impact surfaces; installation of soil coverings, such as grass or sod; and land-use controls. See also Monitoring, Reevaluation, and Abatement.

Interior window sill: The portion of the horizontal window ledge that protrudes into the interior of the room, adjacent to the window sash when the window is closed; often called the window stool.

Investigation (pertaining to EBL case): The process of determining the source of lead exposure for a child or other resident with an elevated blood lead level. Investigation consists of administration of a questionnaire, comprehensive environmental sampling, case management, and other measures.





Investigator: A person who conducts an investigation of a dwelling where a resident has an elevated blood lead level. The investigator must be proficient in interviewing techniques, environmental sampling, and the interpretation of risk assessment and environmental sampling data.

Laboratory analysis: A determination of the lead content by atomic absorption spectroscopy, inductively coupled plasma emission spectroscopy, or laboratory-based K or L x-ray fluorescence, or an equivalent method.

Landfill: A State-licensed or State-permitted disposal facility that meets municipal solid waste standards (see Federal regulations at 40 CFR 258).

Landfill liner: A continuous layer of natural or synthetic materials placed beneath and sometimes around a surface impoundment, landfill, or landfill cell. The layer restricts the downward or lateral escape of hazardous waste, hazardous waste constituents, or leachate (40 CFR Part 258).

Latex: A waterborne emulsion paint made with synthetic binders, such as 100-percent acrylic, vinyl acrylic, terpolymer, or styrene acrylic; a stable emulsion of polymers and pigment in water.

Lead: Lead includes metallic lead and inorganic and organic compounds of lead.

Lead-based paint: Any paint, varnish, shellac, or other coating that contains lead equal to or greater than 1.0 mg/cm² as measured by XRF or laboratory analysis, or 0.5 percent by weight $(5,000~\mu\text{g/g},\,5,000~\text{ppm},\,\text{or}\,5,000~\text{mg/kg})$ as measured by laboratory analysis. (Local definitions may vary.)

Lead-based paint hazard: A condition in which exposure to lead from lead-contaminated dust, lead-contaminated soil, or deteriorated lead-based paint would have an adverse effect on human health (as established by the EPA Administrator under Title IV of the Toxic Substances Control Act). Lead-based paint hazards

include for example, deteriorated lead-based paint, leaded dust levels above applicable standards, and bare leaded soil above applicable standards.

Lead-based paint hazard control: Activities to control and eliminate lead-based paint hazards, including interim controls, abatement, and complete abatement.

Lead-based paint abatement planner/designer: An individual who has completed an accredited training program on planning and designing lead-based paint abatement projects.

Lead-based paint abatement worker: See Worker.

Lead carbonate: A pigment used in some leadbased paints as a hiding agent; also known as white lead.

Lead-contaminated dust: Surface dust in residences that contains an area or mass concentration of lead in excess of the standard established by the EPA Administrator, pursuant to Title IV of the Toxic Substances Control Act. Until the EPA standards are set, the HUD-recommended clearance and risk assessment standards for leaded dust are 100 $\mu g/ft^2$ on floors, 500 $\mu g/ft^2$ on interior window sills, and 800 $\mu g/ft^2$ on window troughs. The recommended standard for lead hazard screens for floors is 50 $\mu g/ft^2$ and for window troughs is 400 $\mu g/ft^2$.

Lead-contaminated soil: Bare soil on residential property that contains lead in excess of the standard established by the EPA Administrator, pursuant to Title IV of the Toxic Substances Control Act. The HUD-recommended standard and interim EPA guidance is 400 $\mu g/g$ for high-contact play areas and 2,000 $\mu g/g$ in other bare areas of the yard. Soil contaminated with lead at levels greater than or equal to 5,000 $\mu g/g$ should be abated by removal or paving.

Lead-free dwelling: A lead-free dwelling contains no lead-based paint and has interior dust and exterior soil lead levels below the applicable HUD and EPA standards.





Lead hazard screen: A means of determining whether residences in good condition should have a full risk assessment. Also called a risk assessment screen.

Lead-poisoned child: A child with a single blood lead level that is greater than or equal to 20 μ g/dL or consecutive blood lead levels greater than or equal to 15 μ g/dL. Local definitions may vary.

Lead-specific detergent: A cleaning agent manufactured specifically for cleaning and removing leaded dust or other lead contamination.

Leaded dust: See Lead-contaminated dust.

Leaded zinc: A paint primer made from zinc oxide and lead sulfates.

Licensed: Holding a valid license or certification issued by EPA or by an EPA-approved State program pursuant to Title IV of the Toxic Substances Control Act. The license is based on certification for lead-based paint hazard control work. See also Certified.

Listed waste: A hazardous waste that has been placed on one of three lists developed by EPA: nonspecific source wastes, specific source wastes, and commercial chemical products. The lists were developed by examining different types of waste and chemical products to determine if they exhibited one of the four characteristics of hazardous waste (toxicity, corrosivity, ignitability, or reactivity), met the statutory definition of hazardous waste, were acutely toxic or acutely hazardous, or were otherwise toxic.

Maintenance: Work intended to maintain adequate living conditions in a dwelling, which has the potential to disturb lead-based paint or paint that is suspected of being lead-based.

Manifest: The shipping document (EPA Form 8700–22 or a comparable form required by the State or locality) used for identifying the quantity, composition, origin, routing, and destination of hazardous waste during its transport

from the point of generation to the point of treatment, storage, or disposal. Also, a shipping document used to keep track of items being transported. All hazardous waste must be accompanied by a manifest. See Hazardous waste.

Mat: See Walk-off mat.

Matrix blank: A sample of the matrix (paint chips, soil, or dust) that does not contain the analyte lead. This sample goes through the complete analysis, including digestion.

MDL: See Method detection limit (MDL).

Mean: The arithmetic average of a series of numerical data values; for example, the algebraic sum of the data values divided by the number of data values.

Medical removal: The temporary removal of workers from the job because of the occurrence of elevated blood lead levels as defined in the OSHA Lead Exposure in Construction standard (29 CFR 1926.62).

Method blank: See Digestion blank.

Method detection limit (MDL): The minimum concentration of an analyte that, for a given matrix and method, has a 99-percent probability of being identified, qualitatively or quantitatively measured, and reported to be greater than zero.

mg: Milligram; 1/1,000 of a gram.

Microgram: See µg.

Mil: 1/1,000 of an inch; used to measure thickness.

Milligram: See mg.

Monitoring: Surveillance to determine (1) that known or suspected lead-based paint is not deteriorating, (2) that lead-based paint hazard controls, such as paint stabilization, enclosure, or encapsulation have not failed, (3) that structural problems do not threaten the integrity of hazard controls or of known or suspected





lead-based paint, and (4) that dust lead levels have not risen above applicable standards. There are two types of monitoring activities; visual surveys by property owners and reevaluations by certified risk assessors. Visual surveys are generally conducted annually for the purpose of making the first three determinations listed above. Reevaluations are conducted in accordance with the Standard Reevaluation Schedule (or more frequently, if needed) for the purpose of making all four determinations. Monitoring is not required in properties known to be free of lead-based paint. See also Reevaluation and Standard reevaluation schedule.

Monofil: A State-approved landfill that accepts only construction debris.

Mouthable surface: See Chewed surface.

Multifamily housing: Housing that contains more than one dwelling unit per location.

NLLAP requirements: Requirements, specified by the EPA National Lead Laboratory Accreditation Program (NLLAP), for accreditation for the lead analysis of paint, soil, and dust matrixes by an EPA-recognized laboratory accreditation organization.

Offsite paint removal: The process of removing a component from a building and stripping the paint from the component at an offsite paint-stripping facility.

Ongoing monitoring: See Monitoring.

Owner: A person, firm, corporation, guardian, conservator, receiver, trustee, executor, government agency or entity, or other judicial officer who, alone or with others, owns, holds, or controls the freehold or leasehold title or part of the title to property, with or without actually possessing it. This definition includes a vendee who possesses the title, but does not include a mortgagee or an owner of a reversionary interest under a ground rent lease.

Oxidation: A chemical reaction that occurs upon exposure to oxygen. Some coatings cure by oxidation; oxygen enters the liquid coating and crosslinks (attaches) the resin molecules. This film-forming method is also called "air cure" or "air dry." Oxidation also causes rust to form on metals and paint to chalk.

Paint film stabilization: The process of wet scraping, priming, and repainting surfaces coated with deteriorated lead-based paint; paint film stabilization includes cleanup and clearance.

Paint removal: An abatement strategy that entails the removal of lead-based paint from surfaces. For lead hazard control work, this can mean using chemicals, heat guns below 1,100 °F, and certain *contained* abrasive methods. Open flame burning, open abrasive blasting, sandblasting, water blasting, and extensive dry scraping are prohibited paint removal methods. (Methylene chloride paint removers and dry scraping are also not recommended.)

Patch test: A test method or procedure to assess the adhesion of an encapsulant coating to a substrate covered with a layer or layers of lead-based paint.

Personal breathing zone samples: Air samples collected from the breathing zone of a worker (within a 1-foot radius of the worker's mouth) but outside the respirator. The samples are collected with a personal sampling pump operating at 2 liters per minute, drawing air through a 37 mm mixed cellulose ester filter housed in a closed-face cassette with a pore size of 0.8 microns. See Exposure monitoring.

Personal Protective Equipment (PPE): Equipment for protecting the eyes, face, head, and/or extremities; includes protective clothing, respiratory devices, and protective shields; used when hazards capable of causing bodily injury or impairment are encountered.





PHA: See Public Housing Agency (PHA).

Pigment: Insoluble, finely ground materials that give paint its properties of color and hide.

Pigment Volume Concentration (PVC): Pigment volume as a percentage of the total non-volatile ingredients.

Pilot project: In multifamily housing, the testing of a lead-based paint hazard control strategy on a limited number of dwellings, usually those that are vacant, to determine the feasibility of carrying out such a strategy in the entire multifamily housing development; usually involves paint testing, air sampling, wipe sampling, worksite preparation, and a variety of lead-based paint hazard control treatments.

Plastic: See Polyethylene plastic.

Polyethylene plastic: All references to polyethylene plastic refer to 6-mil plastic sheeting or polyethylene bags (or doubled bags if using 4-mil polyethylene bags), or any other thick plastic material shown to demonstrate at least equivalent performance. Plastic used to contain waste should be capable of completely containing the waste and, after being properly sealed, should remain leak-tight with no visible signs of discharge during movement or relocation.

Polyurethane: An exceptionally hard and wear-resistant coating created by the reaction of polyols with a multifunctional isocyanate; often used to seal wood floors following lead-based paint hazard control work and cleaning.

Precision: The degree to which a set of observations or measurements of the same property, usually obtained under similar conditions, conform to themselves; a data quality indicator. Precision is usually expressed in either absolute or relative terms as standard deviation, variance, or range. Often known as "reproducibility."

Primary prevention: The process of controlling lead hazards to prevent exposure *before* a child is poisoned. See Secondary prevention and Tertiary prevention.

Primary standard: A substance or device with a property or value that is unquestionably accepted, within specified limits, in establishing the value of the same or related property of another substance or device.

Public Housing Agency (PHA): Any State, county, municipality, or other government entity or public body, or agency or instrumentality thereof, authorized to engage or assist in the development or operation of housing for low-income families.

PVC: See Pigment Volume Concentration (PVC).

Quality Assurance (QA): An integrated system of activities involving planning, quality control, quality assessment, reporting, and quality improvement to ensure that a product or service meets defined standards of quality within a stated level of confidence.

Quality Control (QC): The overall system of technical activities whose purpose is to measure and control the quality of a product or service so that it meets the needs of users. The aim is to provide a level of quality that is satisfactory, adequate, dependable, and economical.

Random sample: A sample drawn from a population in a way that allows each member of the population to have an equal chance of being selected. Random sampling is a process used to identify locations for the lead-based paint inspections in multifamily dwellings. See also Targeted sample and Worst-case sample.

RCRA: See Resource Conservation and Recovery Act (RCRA).

Reevaluation: In lead hazard control work, the combination of a visual assessment and collection of environmental samples performed by a certified risk assessor to determine if a previously implemented lead-based paint hazard control measure is still effective and if the dwelling remains lead-safe.





Reference material: A material or substance that has at least one sufficiently well established property that can be used to calibrate an apparatus, assess a measurement method, or assign values to materials.

Reinspection: See Reevaluation.

Removal: See Paint removal.

Renovation: Work that involves construction and/or home or building improvement measures such as window replacement, weatherization, remodeling, and repainting.

Replacement: A strategy of abatement that entails the removal of building components coated with lead-based paint (such as windows, doors, and trim) and the installation of new components free of lead-based paint.

Representative sample: A sample of a universe or whole (e.g., waste sample pile, lagoon, groundwater, or waste stream) that can be expected to exhibit the average properties of the entire universe or whole.

Resident: A person who lives in a dwelling.

Resource Conservation and Recovery Act (RCRA): The primary Federal statute governing waste management from generation to disposal. RCRA defines the criteria for hazardous and nonhazardous waste.

Risk assessment: An onsite investigation of a residential dwelling to discover any lead-based paint hazards. Risk assessments include an investigation of the age, history, management, and maintenance of the dwelling, and the number of children under age 6 and women of childbearing age who are residents; a visual assessment; limited environmental sampling (i.e., collection of dust wipe samples, soil samples, and deteriorated paint samples); and preparation of a report identifying acceptable abatement and interim control strategies based on specific conditions.

Risk assessment screen: A type of risk assessment performed only in buildings in good condition using fewer samples but more stringent evaluation criteria (standards) to determine lead hazards.

Risk assessor: A certified individual who has completed training with an accredited training program and who has been certified to (1) perform risk assessments, (2) identify acceptable abatement and interim control strategies for reducing identified lead-based paint hazards, (3) perform clearance testing and reevaluations, and (4) document the successful completion of lead-based paint hazard control activities.

Sample site: A specific spot on a surface being tested for lead concentration.

Saponification: The chemical reaction between alkalies and oil that produces a type of soap. Because of saponification, oil and alkyd coatings will not adhere to masonry substrates, galvanized metals, or zinc-rich primers. Also a form of incompatibility between types of coatings.

Screen: See Risk assessment screen or Lead hazard screen.

Screening: The process of testing children to determine if they have elevated blood lead levels.

Secondary prevention: The process of identifying children who have elevated blood lead levels through screening and controlling or eliminating the sources of further exposure. See also Primary prevention and Tertiary prevention.

SEL: See Substrate Equivalent Lead (SEL).

Site: The land or body of water where a facility is located or an activity is conducted. The site includes adjacent land used in connection with the facility or activity.





Small-quantity generator: Owners, contractors (generators), or both who produce less than 100 kg of hazardous waste per month and accumulate less than 100 kg of hazardous waste at any one time, or who produce less than 1 kg of acutely hazardous waste per month and accumulate less than 1 kg of acutely hazardous waste at any one time.

Soil: See Bare soil.

Solid waste: As defined by RCRA, the term solid waste means garbage; refuse; sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility; or other discarded materials, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations or from community activities. The term does not include solid or dissolved material in domestic sewage or solid or dissolved material in irrigation return flows or industrial discharges (which are point sources subject to permits under the Clean Water Act), nor does the term include special nuclear or byproduct material as defined by the Atomic Energy Act of 1954.

Spectrum analyzer: A type of XRF analyzer that provides the operator with a plot of the energy and intensity, or counts of both K and L x-ray spectra, as well as a calculated lead concentration. See also XRF analyzer.

Spiked matrix: See Spiked sample.

Spiked sample: A sample prepared by adding a known mass of the target analyte (e.g., leaded dust) to a specific amount of matrix sample (e.g., one dust wipe) for which an independent estimate of the target analyte concentration is available. Spiked samples are used to determine, for example, the effect of the matrix on a method's recovery efficiency. See also Blind sample.

Spot-prime: To apply a paint primer to localized areas of exposed substrate.

Standard deviation: A measure of the precision of a reading; the spread of the deviation from the mean. The smaller the standard deviation, the more precise the analysis. The standard deviation is calculated by first obtaining the mean, or the arithmetic average, of all of the readings. A formula is then used to calculate how much the individual values vary from the mean—the standard deviation is the square root of the arithmetic average of the squares of the deviation from the mean. Many hand calculators have an automatic standard deviation function. See also Mean.

Standard reevaluation schedule (SRS): A schedule that determines the frequency that reevaluations should be performed on a property.

Standard reference material (SRM): A certified reference material produced by the National Institute of Standards and Technology (U.S. Department of Commerce) and characterized for absolute content independent of analytical method. See also Certified reference material.

Subsample: A representative portion of a sample. A subsample may be either a field sample or a laboratory sample. A subsample is often combined with other subsamples to produce a composite sample. See also Composite sample.

Substrate: A surface on which paint, varnish, or other coating has been applied or may be applied. Examples of substrates include wood, plaster, metal, and drywall.

Substrate effect: The radiation returned to an XRF analyzer by the paint, substrate, or underlying material, in addition to the radiation returned by any lead present. This radiation, when counted as lead x-rays by an XRF analyzer contributes to substrate equivalent lead (bias). The inspector may have to compensate for this effect when using XRF analyzers. See also XRF analyzer.





Substrate Equivalent Lead (SEL): The XRF measurement taken on an unpainted surface; used to calculate the corrected lead concentration on a surface by using the following formula: Apparent Lead Concentration—Substrate Equivalent Lead = Corrected Lead Concentration. See also Apparent Lead Concentration (ALC), Corrected Lead Concentration (CLC), and XRF analyzer.

Target housing: Any residential unit constructed before 1978, except dwellings that do not contain bedrooms or dwellings that were developed specifically for the elderly or persons with disabilities—unless a child younger than 6 resides or is expected to reside in the dwelling. In the case of jurisdictions that banned the sale or use of lead-based paint before 1978, the Secretary of HUD may designate an earlier date for defining target housing.

Targeted sample: A sample of dwelling units selected from an apartment building or housing development using information supplied by the owner. The units selected are likely to have the greatest probability of containing lead-based paint hazards. A targeted sample is usually selected for performing risk assessments in multifamily housing when it is not possible to select a worst-case sample. See also Worst-case sample and Random sample.

TCLP: See Toxicity Characteristic Leaching Procedure (TCLP).

Tertiary prevention: Providing medical treatment to children with elevated blood lead levels to prevent more serious injury or death.

Testing combination: A unique surface to be tested that is characterized by the room equivalent, component, substrate, and visible color.

Test location: A specific area on a testing combination where XRF instruments will test for lead-based paint.

Toxicity Characteristic Leaching Procedure (TCLP): A laboratory test to determine if excessive levels of lead or other hazardous materials could leach from a sample into groundwater; usually used to determine if waste is hazardous based on its toxicity characteristics.

Trained: Successful completion of a training course in a particular discipline. For lead hazard control work, the training course must be accredited by EPA or by an EPA-approved State program, pursuant to Title IV of the Toxic Substances Control Act.

Transporter: A person who transports hazardous waste, requiring a manifest under 40 CFR Part 260.10, within the United States by air, rail, highway, or water.

Treatment: In residential lead-based paint hazard control work, any method designed to control lead-based paint hazards. Treatment includes interim controls, abatement, and removal. Hazardous waste "treatment" is a method, technique, or process (such as neutralization) that is designed to change the physical, chemical, or biological character or composition of hazardous waste to neutralize it; render it nonhazardous or less hazardous; recover it; make it safer to transport, store, or dispose; or allow for easier recovery, storage, or volume reduction.

Treatment, Storage, and Disposal (TSD) facility: A facility licensed to handle hazardous waste.

Trisodium phosphate (TSP) detergent: A detergent that contains trisodium phosphate.

Trough: See Window trough.

Truck-mounted vacuum unit: A vacuum system whose components, except for hoses and attachments, are located outside the building undergoing dust removal. The exhaust is vented outside so that the interior dust is not disturbed.

TSD: See Treatment, Storage, and Disposal (TSD) facility.

TSP: See Trisodium phosphate (TSP) detergent.

 μ g (or ug): Micrograms. The prefix micromeans 1/1,000,000 (or one-millionth); a microgram is 1/1,000,000 of a gram and 1/1,000 of a milligram; equal to about 35/1,000,000,000 (35 billionths) of an ounce (an ounce is equal to 28,400,000 μ g).





Urethane-modified alkyd: An alkyd molecule that has been chemically modified by the incorporation of a urethane; a coating, often a varnish, that uses a urethane-modified alkyd resin in the binder.

Useful life: The life expectancy of a coating before it requires refinishing or some other form of maintenance.

VOC: See Volatile Organic Compound (VOC).

Volatile Organic Compound (VOC): Substances that vaporize or evaporate from a coating during the coating or curing process.

Walk-off mat: A washable, fibrous material (preferably with a rubber or vinyl backing) positioned at main entryways to reduce transport of lead dust and lead soil into a building or residence.

White lead: A white pigment, usually lead carbonate. See also Lead carbonate.

Window sill: See Interior window sill.

Window stool: See Interior window sill.

Window trough: For a typical double-hung window, the portion of the exterior window sill between the interior window sill (or stool) and the frame of the storm window. If there is no storm window, the window trough is the area that receives both the upper and lower window sashes when they are both lowered. Sometimes inaccurately called the window "well." See also Window well.

Window well: The space that provides exterior access and/or light to a window that is below grade, i.e., below the level of the surrounding earth or pavement. See also Window trough.

Worker: An individual who has completed training in an accredited program to perform lead-based paint hazard control in housing.

Worksite: Any interior or exterior area where lead-based paint hazard control work takes place.

Worksite preparation level: A set of measures designed to protect residents and the environment from leaded dust, paint chips, or other forms of lead contamination through the erection of barriers and the establishment of access control, resident relocation or movement restrictions, warning signs, ventilation, and other measures.

Worst-case sample: A sample of dwelling units having the greatest probability of containing lead-based paint hazards selected by a risk assessor on the basis of a visual examination of all dwelling units in a housing development or apartment building. See also Targeted sample and Random sample.

XRF analyzer: An instrument that determines lead concentration in milligrams per square centimeter (mg/cm²) using the principle of x-ray fluorescence (XRF). Two types of XRF analyzers are used—direct readers and spectrum analyzers. In these *Guidelines*, the term XRF analyzer only refers to portable instruments manufactured to analyze paint, and does not refer to laboratory-grade units or portable instruments designed to analyze soil.

Appendix 4

Inspector Certification



STATE OF CALIFORNIA DEPARTMENT OF PUBLIC HEALTH



LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:

CERTIFICATE TYPE:

NUMBER:

EXPIRATION DATE:

Lead Inspector/Assessor

LRC-00000459

5/31/2025

Lead Project Monitor

LRC-00000458

5/31/2025

Michelle Ehresman

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD

Appendix 5

CDPH 8552 Inspection Form

LEAD HAZARD EVALUATION REPORT

Section 1 — Date of Lead Hazard Evaluation 4/1/2	4				
Section 2 — Type of Lead Hazard Evaluation (Chec	k one box only)		Ÿ		
✓ Lead Inspection Risk assessment	Clearance Inspection	Other (specify)			
Section 3 — Structure Where Lead Hazard Evaluati	on Was Conducted		Δ		
Address [number, street, apartment (if applicable)]	City	County	Zip Code		
331 The City Drive (Building 2)	Orange	Orange	92868		
Construction date (year) of structure Type of structure Multi-unit building	School or daycare		Children living in structure?		
Unknown Single family dwelling		Don't Know			
Section 4 — Owner of Structure (if business/agenc	y, list con t act person)	*	.,,		
Name		Telephone number	Telephone number		
c/o Vanir Contruction (Scott Battles)		916-677-7024	916-677-7024		
Address [number, street, apartment (if applicable)]	City	State	Zip Code		
4540 Duckhorn Drive, Suite 300	Sacramento	CA	95834		
Section 5 — Results of Lead Hazard Evaluation (ch	eck all that apply)	34			
✓ No lead-based paint detected	ad-based paint detected	Deteriorated	lead-based paint detected		
No lead hazards detected Lead-c	ontaminated <mark>dus</mark> t found [Lead-contaminated s	soil found Other		
Section 6 — Individual Conducting Lead Hazard Ev	raluation		i		
Name		Telephone number			
Michelle Ehresman	858-537-3999				
Address [number, street, apartment (if applicable)]	City	State	Zip Code		
7742 Arjons Drive	San Diego	CA	92126		
CDPH certification number	Signature		Date		
LRC 0459	1	, A	4/27/24		
Name and CDPH certification number of any other individuals	conducting sampling or testing	ng (if applicable)			
	. ,				
			_		
Section 7 — Attachments					
A. A foundation diagram or sketch of the structure indiction lead-based paint;B. Each testing method, device, and sampling proceduC. All data collected, including quality control data, laborated	re used;				
First copy and attachments retained by inspector	Third copy only (no	o attachments) mailed or fa	axed to:		
Second copy and attachments retained by inspector	California Departm Childhood Lead Po 850 Marina Bay Pa Richmond, CA 948	Third copy only (no attachments) mailed or faxed to: California Department of Public Health Childhood Lead Poisoning Prevention Branch Reports 850 Marina Bay Parkway, Building P, Third Floor Richmond, CA 94804-6403 Fax: (510) 620-5656			

Appendix 6

Renovate Right



AUTION CAUTION

CAUTION

CAUTION

CAUTION







1-800-424-LEAD (5323) www.epa.gov/getleadsafe EPA-740-K-10-001 April 2010



Important lead hazard information for families, child care providers and schools.





IT'S THE LAW!

Federal law requires contractors that disturb painted surfaces in homes, child care facilities and schools, built before 1978 to be certified and follow specific work practices to prevent lead contamination. Always ask to see your contractor's certification.

Federal law requires that individuals receive certain information before renovating more than six square feet of painted surfaces in a room for interior projects or more than twenty square feet of painted surfaces for exterior projects or window replacement or demolition in housing, child care facilities and schools built before 1978.

- Homeowners and tenants: renovators must give you this pamphlet before starting work.
- Child care facilities, including preschools and kindergarten classrooms, and the families of children under six years of age that attend those facilities: renovators must provide a copy of this pamphlet to child care facilities and general renovation information to families whose children attend those facilities.



WHO SHOULD READ THIS PAMPHLET?

This pamphlet is for you if you:

- Reside in a home built before 1978.
- Own or operate a child care facility, including preschools and kindergarten classrooms, built before 1978, or
- Have a child under six years of age who attends a child care facility built before 1978.

You will learn:

- Basic facts about lead and your health.
- How to choose a contractor, if you are a property owner.
- What tenants, and parents/guardians of a child in a child care facility or school should consider.
- How to prepare for the renovation or repair job.
- What to look for during the job and after the job is done.
- Where to get more information about lead.

This pamphlet is not for:

- Abatement projects. Abatement is a set of activities aimed specifically at
 eliminating lead or lead hazards. EPA has regulations for certification and training of
 abatement professionals. If your goal is to eliminate lead or lead hazards, contact the
 National Lead Information Center at 1-800-424-LEAD (5323) for more information.
- "Do-it-yourself" projects. If you plan to do renovation work yourself, this document is a good start, but you will need more information to complete the work safely. Call the National Lead Information Center at 1-800-424-LEAD (5323) and ask for more information on how to work safely

in a home with lead-based paint.

Contractor education. Contractors
 who want information about working
 safely with lead should contact
 the National Lead Information
 Center at 1-800-424-LEAD (5323)
 for information about courses and
 resources on lead-safe work practices.



RENOVATING, REPAIRING, OR PAINTING?



- Is your home, your building, or the child care facility or school your children attend being renovated, repaired, or painted?
- Was your home, your building, or the child care facility or school where your children under six years of age attend built before 1978?

If the answer to these questions is YES, there are a few important things you need to know about lead-based paint.

This pamphlet provides basic facts about lead and information about lead safety when work is being done in your home, your building or the child care facility or school your children attend.

The Facts About Lead

- Lead can affect children's brains and developing nervous systems, causing reduced IQ, learning disabilities, and behavioral problems. Lead is also harmful to adults.
- Lead in dust is the most common way people are exposed to lead. People can also get lead in their bodies from lead in soil or paint chips. Lead dust is often invisible.
- Lead-based paint was used in more than 38 million homes until it was banned for residential use in 1978.
- Projects that disturb painted surfaces can create dust and endanger you and your family. Don't let this happen to you. Follow the practices described in this pamphlet to protect you and your family.

LEAD AND YOUR HEALTH

Lead is especially dangerous to children under six years of age.

Lead can affect children's brains and developing nervous systems, causing:

- Reduced IQ and learning disabilities.
- Behavior problems.

Even children who appear healthy can have dangerous levels of lead in their bodies.

Lead is also harmful to adults. In adults, low levels of lead can pose many dangers, including:

- High blood pressure and hypertension.
- Pregnant women exposed to lead can transfer lead to their fetuses. Lead gets into the body when it is swallowed or inhaled.
- People, especially children, can swallow lead dust as they eat, play, and do other normal hand-to-mouth activities.
- People may also breathe in lead dust or fumes if they disturb lead-based paint.
 People who sand, scrape, burn, brush or blast or otherwise disturb lead-based paint risk unsafe exposure to lead.

What should I do if I am concerned about my family's exposure to lead?

- Call your local health department for advice on reducing and eliminating exposures to lead inside and outside your home, child care facility or school.
- Always use lead-safe work practices when renovation or repair will disturb painted surfaces.
- A blood test is the only way to find out if you or a family member already has lead poisoning. Call your doctor or local health department to arrange for a blood test.

For more information about the health effects of exposure to lead, visit the EPA lead website at www.epa.gov/lead/pubs/leadinfo.htm or call 1-800-424-LEAD (5323).

There are other things you can do to protect your family every day.

- Regularly clean floors, window sills, and other surfaces.
- Wash children's hands, bottles, pacifiers, and toys often.
- Make sure children eat a healthy, nutritious diet consistent with the USDA's dietary guidelines, that helps protect children from the effects of lead.
- Wipe off shoes before entering house.



WHERE DOES THE LEAD COME FROM?

Dust is the main problem.

The most common way to get lead in the body is from dust. Lead dust comes from deteriorating lead-based paint and lead-contaminated soil that gets tracked into your home. This dust may accumulate to unsafe levels. Then, normal hand to-mouth activities, like playing and eating (especially in young children), move that dust from surfaces like floors and window sills into the body.

Home renovation creates dust.

Common renovation activities like sanding, cutting, and demolition can create hazardous lead dust and chips.

Proper work practices protect you from the dust.

The key to protecting yourself and your family during a renovation, repair or painting job is to use lead-safe work practices such as containing dust inside the work area, using dust-minimizing work methods, and conducting a careful cleanup, as described in this pamphlet.

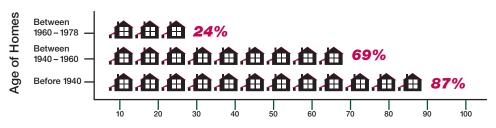
Other sources of lead.

Remember, lead can also come from outside soil, your water, or household items (such as lead-glazed pottery and lead crystal). Contact the National Lead Information Center at 1-800-424-LEAD (5323) for more information on these sources.



CHECKING YOUR HOME FOR LEAD-BASED PAINT

Percentage of Homes Likely to Contain Lead



Older homes, child care facilities, and schools are more likely to contain lead-based paint.

Homes may be single-family homes or apartments. They may be private, government-assisted, or public housing. Schools are preschools and kindergarten classrooms. They may be urban, suburban, or rural.

You have the following options:

You may decide to assume your home, child care facility, or school contains lead. Especially in older homes and buildings, you may simply want to assume lead-based paint is present and follow the lead-safe work practices described in this brochure during the renovation, repair, or painting job.

You can hire a certified professional to check for lead-based paint.

These professionals are certified risk assessors or inspectors, and can determine if your home has lead or lead hazards.

- A certified inspector or risk assessor can conduct an inspection telling you whether your home, or a portion of your home, has lead-based paint and where it is located. This will tell you the areas in your home where lead-safe work practices are needed.
- A certified risk assessor can conduct a risk assessment telling you if your home currently has any lead hazards from lead in paint, dust, or soil. The risk assessor can also tell you what actions to take to address any hazards.
- For help finding a certified risk assessor or inspector, call the National Lead Information Center at 1-800-424-LEAD (5323).

You may also have a certified renovator test the surfaces or components being disturbed for lead using a lead test kit. Test kits must be EPA-recognized and are available at hardware stores. They include detailed instructions for their use.

FOR PROPERTY OWNERS

You have the ultimate responsibility for the safety of your family, tenants, or children in your care.

This means properly preparing for the renovation and keeping persons out of the work area (see p. 8). It also means ensuring the contractor uses lead-safe work practices.

Federal law requires that contractors performing renovation, repair and painting projects that disturb painted surfaces in homes, child care facilities, and schools built before 1978 be certified and follow specific work practices to prevent lead contamination.

Make sure your contractor is certified, and can explain clearly the details of the job and how the contractor will minimize lead hazards during the work.

- You can verify that a contractor is certified by checking EPA's website at epa.gov/getleadsafe or by calling the National Lead Information Center at 1-800-424-LEAD (5323). You can also ask to see a copy of the contractor's firm certification.
- Ask if the contractor is trained to perform lead-safe work practices and to see a copy of their training certificate.
- Ask them what lead-safe methods they will use to set up and perform the job in your home, child care facility or school.
- Ask for references from at least three recent jobs involving homes built before 1978, and speak to each personally.

Always make sure the contract is clear about how the work will be set up, performed, and cleaned.

- Share the results of any previous lead tests with the contractor.
- You should specify in the contract that they follow the work practices described on pages 9 and 10 of this brochure.
- The contract should specify which parts of your home are part of the work area and specify which lead-safe work practices will be used in those areas. Remember, your contractor should confine dust and debris to the work area and should minimize spreading that dust to other areas of the home.
- The contract should also specify that the contractor will clean the work area, verify that it was cleaned adequately, and re-clean it if necessary.

If you think a worker is not doing what he is supposed to do or is doing something that is unsafe, you should:

- Direct the contractor to comply with regulatory and contract requirements.
- Call your local health or building department, or
- Call EPA's hotline 1-800-424-LEAD (5323).

If your property receives housing assistance from HUD (or a state or local agency that uses HUD funds), you must follow the requirements of HUD's Lead-Safe Housing Rule and the ones described in this pamphlet.

FOR TENANTS AND FAMILIES OF CHILDREN UNDER SIX YEARS OF AGE IN CHILD CARE FACILITIES AND SCHOOLS

You play an important role ensuring the ultimate safety of your family.

This means properly preparing for the renovation and staying out of the work area (see p. 8).

Federal law requires that contractors performing renovation, repair and painting projects that disturb painted surfaces in homes built before 1978 and in child care facilities and schools built before 1978, that a child under six years of age visits regularly, to be certified and follow specific work practices to prevent lead contamination.

The law requires anyone hired to renovate, repair, or do painting preparation work on a property built before

1978 to follow the steps described on pages 9 and 10 unless the area where the work will be done contains no lead-based paint.

If you think a worker is not doing what he is supposed to do or is doing something that is unsafe, you should:

- · Contact your landlord.
- · Call your local health or building department, or
- Call EPA's hotline 1-800-424-LEAD (5323).

If you are concerned about lead hazards left behind after the job is over, you can check the work yourself (see page 10).



PREPARING FOR A RENOVATION

The work areas should not be accessible to occupants while the work occurs.

The rooms or areas where work is being done may need to be blocked off or sealed with plastic sheeting to contain any dust that is generated. Therefore, the contained area may not be available to you until the work in that room or area is complete, cleaned thoroughly, and the containment has been removed. Because you may not have access to some areas during the renovation, you should plan accordingly.

You may need:

- Alternative bedroom, bathroom, and kitchen arrangements if work is occurring in those areas of your home.
- A safe place for pets because they too can be poisoned by lead and can track lead dust into other areas of the home.
- A separate pathway for the contractor from the work area to the outside in order to bring materials in and out of the home. Ideally, it should not be through the same entrance that your family uses.
- A place to store your furniture. All furniture and belongings may have to be moved from the work area while the work is being done. Items that can't be moved, such as cabinets, should be wrapped in plastic.
- To turn off forced-air heating and air conditioning systems while the work is being done. This prevents dust from spreading through vents from the work area to the rest of your home. Consider how this may affect your living arrangements.

You may even want to move out of your home temporarily while all or part of the work is being done.

Child care facilities and schools may want to consider alternative accommodations for children and access to necessary facilities.



DURING THE WORK

Federal law requires contractors that are hired to perform renovation, repair and painting projects in homes, child care facilities, and schools built before 1978 that disturb painted surfaces to be certified and follow specific work practices to prevent lead contamination.

The work practices the contractor must follow include these three simple procedures, described below:

- 1. Contain the work area. The area must be contained so that dust and debris do not escape from that area. Warning signs must be put up and plastic or other impermeable material and tape must be used as appropriate to:
 - Cover the floors and any furniture that cannot be moved.
 - Seal off doors and heating and cooling system vents.

These will help prevent dust or debris from getting outside the work area.

2. Avoid renovation methods that generate large amounts of lead-contaminated dust.

Some methods generate so much lead-contaminated dust that their use is prohibited.

They are:

- · Open flame burning or torching.
- Sanding, grinding, planing, needle gunning, or blasting with power tools and equipment not equipped with a shroud and HEPA vacuum attachment.
- Using a heat gun at temperatures greater than 1100°F.

There is no way to eliminate dust, but some renovation methods make less dust than others. Contractors may choose to use various methods to minimize dust generation, including using water to mist areas before sanding or scraping; scoring paint before separating components; and prying and pulling apart components instead of breaking them.

- **3. Clean up thoroughly.** The work area should be cleaned up daily to keep it as clean as possible. When all the work is done, the area must be cleaned up using special cleaning methods before taking down any plastic that isolates the work area from the rest of the home. The special cleaning methods should include:
 - Using a HEPA vacuum to clean up dust and debris on all surfaces, followed by
 - Wet wiping and wet mopping with plenty of rinse water.

When the final cleaning is done, look around. There should be no dust, paint chips, or debris in the work area. If you see any dust, paint chips, or debris, the area must be re-cleaned.

FOR PROPERTY OWNERS: AFTER THE WORK IS DONE

When all the work is finished, you will want to know if your home, child care facility, or school has been cleaned up properly. Here are some ways to check.

Ask about your contractor's final cleanup check. Remember, lead dust is often invisible to the naked eye. It may still be present even if you cannot see it. The contractor must use disposable cleaning cloths to wipe the floor of the work area and compare them to a cleaning verification card to determine if the work area was adequately cleaned.

To order a cleaning verification card and detailed instructions visit the EPA lead website at www.epa.gov/lead or contact the National Lead Information Center at 1-800-424-LEAD (5323) or visit their website at www.epa.gov/lead/nlic.htm.

You also may choose to have a lead-dust test. Lead-dust tests are wipe samples sent to a laboratory for analysis.

- You should specify in your contract that a lead-dust test will be done. In this case, make it clear who will do the testing.
- Testing should be done by a lead professional.

If you choose to do the testing, some EPA-recognized lead laboratories will send you a kit that allows you to collect samples and send them back to the lab for analysis.

Contact the National Lead Information Center at 1-800-424-LEAD (5323) for lists of qualified professionals and EPA-recognized lead labs.

If your home, child care facility, or school fails the dust test, the area should be re-cleaned and tested again.

Where the project is done by contract, it is a good idea to specify in the contract that the contractor is responsible for re-cleaning if the home, child care facility, or school fails the test.



FOR ADDITIONAL INFORMATION

You may need additional information on how to protect yourself and your children while a job is going on in your home, your building, or child care facility.

The National Lead Information Center at 1-800-424-LEAD (5323) or www.epa.gov/lead/nlic.htm can tell you how to contact your state, local, and/or tribal programs or get general information about lead poisoning prevention.

- State and tribal lead poisoning prevention or environmental protection programs can provide information about lead regulations

 and potential sources of force is laid for reducing.
- and potential sources of financial aid for reducing lead hazards. If your state or local government has requirements more stringent than those described in this pamphlet, you must follow those requirements.
- Local building code officials can tell you the regulations that apply to the renovation work that you are planning.
- State, county, and local health departments can provide information about local programs, including assistance for lead-poisoned children and advice on ways to get your home checked for lead.

The National Lead Information Center can also provide a variety of resource materials, including the following guides to lead-safe work practices. Many of these materials are also available at www.epa.gov/lead/pubs/brochure.htm.

- Steps to Lead Safe Renovation, Repair and Painting.
- Protect Your Family from Lead in Your Home
- Lead in Your Home: A Parent's Reference Guide





For the hearing impaired, call the Federal Information Relay Service at 1-800-877-8339 to access any of the phone numbers in this brochure.

10

OTHER FEDERAL AGENCIES

EPA Regional Offices

EPA addresses residential lead hazards through several different regulations.

EPA requires training and certification for conducting abatement and renovations, education about hazards associated with renovations, disclosure about known lead paint and lead hazards in housing, and sets lead-paint hazard standards.

Your Regional EPA Office can provide further information regarding lead safety and lead protection programs at **epa.gov/lead**.

Region 1

(Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island, Vermont) Regional Lead Contact U.S. EPA Region 1 Suite 1100 One Congress Street Boston, MA 02114-2023 (888) 372-7341

Region 2

(New Jersey, New York, Puerto Rico, Virgin Islands) Regional Lead Contact U.S. EPA Region 2 2890 Woodbridge Avenue Building 205, Mail Stop 225 Edison, NJ 08837-3679 (732) 321-6671

Region 3

(Delaware, Maryland, Pennsylvania, Virginia, Washington, DC, West Virginia) Regional Lead Contact U.S. EPA Region 3 1650 Arch Street Philadelphia, PA 19103-2029 (215) 814-5000

Region 4

(Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee) Regional Lead Contact U.S. EPA Region 4 61 Forsyth Street, SW Atlanta, GA 30303-8960 (404) 562-9900

Region 5

(Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin) Regional Lead Contact U.S. EPA Region 5 77 West Jackson Boulevard Chicago, IL 60604-3507 (312) 886-6003

Region 6

(Arkansas, Louisiana, New Mexico, Oklahoma, Texas) Regional Lead Contact U.S. EPA Region 6 1445 Ross Avenue, 12th Floor Dallas, TX 75202-2733 (214) 665-6444

Region 7

(Iowa, Kansas, Missouri, Nebraska) Regional Lead Contact U.S. EPA Region 7 901 N. 5th Street Kansas City, KS 66101 (913) 551-7003

Region 8

(Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming) Regional Lead Contact U.S. EPA Region 8 1595 Wynkoop Street Denver, CO 80202 (303) 312-6312

Region 9

(Arizona, California, Hawaii, Nevada) Regional Lead Contact U.S. Region 9 75 Hawthorne Street San Francisco, CA 94105 (415) 947-8021

Region 10

(Alaska, Idaho, Oregon, Washington) Regional Lead Contact U.S. EPA Region 10 1200 Sixth Avenue Seattle, WA 98101-1128 (206) 553-1200

CPSC

The Consumer Product Safety
Commission (CPSC) protects the public
from the unreasonable risk of injury or
death from 15,000 types of consumer
products under the agency's jurisdiction.
CPSC warns the public and private
sectors to reduce exposure to lead and
increase consumer awareness. Contact
CPSC for further information regarding
regulations and consumer product safety.

CPSC

4330 East West Highway Bethesda, MD 20814 Hotline 1-(800) 638-2772 www.cpsc.gov

CDC Childhood Lead Poisoning Prevention Branch

The Centers for Disease Control and Prevention (CDC) assists state and local childhood lead poisoning prevention programs to provide a scientific basis for policy decisions, and to ensure that health issues are addressed in decisions about housing and the environment. Contact CDC Childhood Lead Poisoning Prevention Program for additional materials and links on the topic of lead.

CDC Childhood Lead Poisoning Prevention Branch

4770 Buford Highway, MS F-40 Atlanta, GA 30341 (770) 488-3300 www.cdc.gov/nceh/lead

HUD Office of Healthy Homes and Lead Hazard Control

The Department of Housing and Urban Development (HUD) provides funds to state and local governments to develop cost-effective ways to reduce lead-based paint hazards in America's privately-owned low-income housing. In addition, the office enforces the rule on disclosure of known lead paint and lead hazards in housing, and HUD's lead safety regulations in HUD-assisted housing, provides public outreach and technical assistance, and conducts technical studies to help protect children and their families from health and safety hazards in the home. Contact the HUD Office of Healthy Homes and Lead Hazard Control for information on lead regulations, outreach efforts, and lead hazard control research and outreach grant programs.

U.S. Department of Housing and Urban Development

Office of Healthy Homes and Lead Hazard Control 451 Seventh Street, SW, Room 8236 Washington, DC 20410-3000 HUD's Lead Regulations Hotline (202) 402-7698 www.hud.gov/offices/lead/

12



SAMPLE PRE-RENOVATION FORM

This sample form may be used by renovation firms to document compliance with the Federal pre-renovation education and renovation, repair, and painting regulations.

Occupant Confirmation Pamphlet Receipt

□ I have received a copy of the lead hazard information pamphlet informing me of the potential risk of the lead hazard exposure from renovation activity to be performed in my dwelling unit. I received this pamphlet before the work began.		
Printed Name of Owner-occupant		
Signature of Owner-occupant	Signature Date	
Renovator's Self Certification Option (for tend Instructions to Renovator: If the lead hazard int signature was not obtainable, you may check t	formation pamphlet was delivered but a tenant	
pamphlet to the rental dwelling unit listed b	faith effort to deliver the lead hazard information elow at the date and time indicated and that the of receipt. I further certify that I have left a copy nt.	
	welling unit listed below and that the occupant receipt. I further certify that I have left a copy of	
Printed Name of Person Certifying Delivery	Attempted Delivery Date	
Signature of Person Certifying Lead Pamphlet	Delivery	
Unit Address		

Note Regarding Mailing Option — As an alternative to delivery in person, you may mail the lead hazard information pamphlet to the owner and/or tenant. Pamphlet must be mailed at least seven days before renovation. Mailing must be documented by a certificate of mailing from the post office.

COMPREHENSIVE ASBESTOS SURVEY REPORT FOR DEMOLITION

PROJECT NAME:

ORANGE COUNTY JUVENILE HALL-BUILDING 5 (ROOMS 19-20)



PROJECT ADDRESS:

331 The City Drive, S. Orange, California 92868

Prepared for:

Mr. Scott L. Battles Vanir Construction Management, Inc 4540 Duckhorn Drive, Suite 300 Sacramento, California 95834

Prepared by:

MTGL, Inc. 7742 Arjons Dr. San Diego, California 92126 858-537-3999

Project Number:

SDPE-24-061.1CT

Report By:

Michelle Ehresman, CAC

CAC Certification Number: 14-5323

CAC Expiration Date: November 19, 20204

Date of Report:

April 18, 2024

Version 1.0

TABLE OF CONTENTS

INTRODUCTIONSection 1
General Information
Project Information
Site/Building Description
Suspect Materials Observed
INVESTIGATION LIMITATIONS & WARRANTYSection 2
ASBESTOS SURVEY METHODOLOGYSection 3
General References
Visual Inspection
Homogeneous Material Classifications
Sampling Procedures
Laboratory Procedures
Method of Analysis
Laboratory Quality Control Program
ASBESTOS SURVEY OBSERVATIONS AND FINDINGS Section 4
Summary
Table 1: Positively Identified Materials that Contain Asbestos (ACM and ACCM) and
Assessment of Material Condition.
Table 2: Materials found to be Negative for Asbestos
General Information
Environmental Protection Agency (EPA)
California Occupational Safety & Health Agency (Cal/OSHA)
National Emission Standards for Hazardous Air Pollutants (NESHAP)
CONCLUSIONS & RECOMMENDATIONS Section 5
APPENDICES Section 6
Appendix 1 – Asbestos Laboratory Results & Chain of Custodies
Appendix 2 – Site Map with Sample Location
Appendix 3 – Photo Documentation
Appendix 4 – Inspector Certifications

SECTION 1 INTRODUCTION

GENERAL INFORMATION

MTGL, Inc. was retained to conduct a survey for suspect asbestos containing materials. The intent of this survey is to pre-determine the presence of EPA/OSHA regulated Asbestos Containing Materials and Asbestos Containing Construction Materials (ACCM) that may need to be addressed prior to scheduled demolition and/or renovation activities.

Buildings 2, 5, 7 and 9 shared the same homogeneous silver rolled roofing system and black roofing mastic. Samples collected were representative of the shared roofing materials.

MTGL's scope of work was limited to the following:

- Review of project drawings.
- Conduct a pre-construction asbestos inspection limited to Client specified locations in accordance with NESHAP Regulations and the collection of bulk samples of suspect ACM.
- Submit samples to a NVLAP accredited laboratory for analysis of asbestos fiber content using polarized-light microscopy.
- Prepare report with material description, sampling locations, analytical results, and recommendations for proper handling/abatement prior to demolition and/or renovation activities.

PROJECT INFORMATION

Survey Requested/Authorized By: Mr. Scott L. Battles

Type of Survey Requested: Limited (Restricted to Client Specified Locations Only)

Destructive Sampling Allowed by Client: Yes

Project Name: ORANGE COUNTY JUVENILE HALL BUILDING 5 (ROOMS 19-20)

Project Address: 331 The City of Orange Dr. S in the city of Orange in the State of California.

Date of Inspection: March 27, 2024 to April 2, 2024

AHERA Certified Building Inspector Name: Darla Beery

AHERA Certified Building Inspector Number: 2023ABCA171101

Additional AHERA Certified Building Inspector Name: Michelle Ehresman

Additional AHERA Certified Building Inspector Number: ABIR0727230010N35227

Local Air District: South Coast Air Quality Management District (Sampling method, lab

qualifications, lab analytical procedures, and lab method of analysis were

performed in compliance with Rule 1403 (d)(1)(A) and 40 CFR Part 763 - Asbestos. requirments)

Laboratory: EMLab P&K, LLC – ID#: 3590834/3600732/3600738

9445 Farnham St, Suite 103, San Diego, CA 92123

(866) 888-6653 Fax (623) 780-7695 www.emlab.com

Laboratory Sample Analysis Method: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA

METHOD 600/R-93-116, SOP EM-AS-S-1267)

Sampling Protocols: EPA 40CFR 763.86 Methods

SITE/BUILDING DESCRIPTION

Structure Type: Commercial Facility

Year Built: Unknown

Date of known additions: Unknown

Building Structural Damage (If Any): None Observed

Approximate Square Feet of Surveyed Area: 2,000

Structure Frame: Wood

If other, describe: None

Structure Foundation: Concrete Slab On Grade

If other, describe: None

Number of Floors: 1

Building Occupied: Yes

SUSPECT MATERIALS OBSERVED

Suspect Materials Observed During the Asbestos Survey Conducted

- Concrete Floor
- Concrete Wall
- 12'x12' Dotted Ceiling Tile and Ceiling Tile Mastic
- Unfinished Drywall (Ceiling)
- Ceramic Wall Tile & Mortar
- Exterior Brick & Grout
- Exterior Window Putty
- Exterior Concrete Slab and Expansion Caulk
- Pipe Elbow Insulation
- Rolled Roofing and Roof Mastic
- HVAC Seam Caulking

Inaccessible Materials Presumed to be Asbestos Content:

• None

SECTION 2 INVESTIGATION LIMITATIONS & WARRANTY

Per the agreement between The Client and MTGL, Inc., the scope of services was performed as described in this report.

The intent of this survey is to pre-determine the presence of EPA/OSHA regulated asbestos containing building materials that may need to be addressed prior to scheduled demolition and/or renovation activities.

INVESTIGATION LIMITATIONS

MTGL, Inc. did not conduct testing within interstitial wall cavities, ceiling plenums, HVAC ventilation systems or crawlspaces or other locations of the facility, outside of the Client specified areas.

The findings of this report are valid as of the date of the survey and sample collection. Changes in the condition of the property can occur with passage of time, whether they are due to natural processes or the works of man on this or adjacent properties. In addition, changes in the state-of-art technology and/or government codes may occur. Due to such changes, the findings of this report may be invalidated wholly or in part by conditions beyond our control. Due to changes that can occur over time, submittals of this report to Regulatory Agencies may require additional site visits and assessment to document current conditions.

The final assessment of the potential for the existence of hazardous contaminants at the site should be considered a professional opinion based on the data obtained during the investigation and should not be considered a definitive statement that a hazardous contaminant or conditions are, or is not, present in the area of study. These opinions have been derived in accordance with current standards of practice.

This report is intended solely for use by the parties to whom it is addressed. This report is not intended for and may not contain sufficient information for purposes other than qualitative evaluation of asbestos or conditions at the time of our evaluation. Reliance on this report for other purposes or by other parties shall be at the user's sole risk.

WARRANTY

MTGL, Inc. warrants that the findings contained herein have been prepared with the level of care and skill exercised by experienced and knowledgeable environmental consultants who are appropriately licensed or otherwise trained to perform asbestos inspections and assessments pursuant to the scope of work required on this project. MTGL's Asbestos Survey Reports are prepared by trained certified professionals without a conflict of interest in the demolition(s) or renovation project(s) as per the Business and Professions Code 7180 (BP7180).

MTGL, Inc. warrants that the findings contained herein have been prepared in general accordance with accepted professional practices as applied by similar professionals in the community at the time of its preparation. Changes in the state of the art or in applicable regulations cannot be anticipated and have not been addressed in this report.

The survey included inspection of visible and accessible materials. MTGL did not inspect or sample inaccessible areas and did not dismantle any part of the structure to survey inaccessible areas. For the purpose of this warranty, inaccessible is defined as areas that could not be tested (sampled) without destruction of the structure or a portion of the structure. Inaccessible materials that are visible to MTGL's inspectors shall be assumed to be asbestos containing. No other warranty is expressed, or implied.

SECTION 3 ASBESTOS SURVEY METHODOLOGY

GENERAL REFERENCES

The asbestos survey consisted of two major activities: visual inspection and sampling. Although these activities are listed separately, they are integrated tasks.

VISUAL INSPECTION

The visual inspection was performed by an AHERA Certified Building Inspector under the direction of a California Certified Asbestos Consultant. An initial building walkthrough was conducted to determine the presence of suspect materials that were accessible or exposed. Materials that were similar in general appearance were grouped into homogeneous sampling areas.

HOMOGENEOUS MATERIAL CLASSIFICATIONS

A preliminary walkthrough of the building was conducted to determine areas of materials that were visually similar in color, texture, and general appearance and that appeared to have been installed at the same time. Such materials are termed "homogeneous materials" by the EPA. During this walkthrough, the approximate locations of these homogeneous materials were noted. Only materials that were accessible or exposed and suspected to contain asbestos were identified.

Following the EPA protocols, each identified suspect homogeneous material is placed in one of the following EPA classifications:

- Surfacing Materials (spray or trowel applied materials)
- Thermal System Insulation (materials applied to various mechanical systems)
- Miscellaneous Materials (any material which do not fit either of the above categories, such as floor tiles, etc.)

SAMPLING PROCEDURES

Following the walkthrough, the inspector collected selected samples of exposed or accessible materials identified as suspect material. Sampling was limited to accessible materials not involving destruction of walls, other building elements, physical barriers, or the structural integrity of the item being tested.

EPA guidelines were used to determine the sampling protocol. Sampling locations that were chosen to be representative of the homogeneous sampling area. While an effort was made to collect samples randomly, samples were taken preferentially from damaged areas or areas which were the least visible to minimize disturbance of the material.

Samples of surfacing material were collected in general accordance with the EPA random sampling protocol outlined in the EPA publication, "Asbestos in Buildings: Simplified Sampling Scheme for Friable Surfacing Materials" (EPA 560/5-85-030a, October 1985).

Samples of miscellaneous materials were also taken as randomly as possible, while attempting to sample already damaged areas so as to minimize disturbance of the material.

A minimum of three samples were collected of each homogeneous material. Depending on the quantity of homogeneous material, additional samples may be collected to avoid the possibility of false negative results.

LABORATORY PROCEDURES

Method of Analysis

Analysis was performed by visually observing the bulk sample and preparing slides for microscopic examination and identification. The samples were mounted on slides and then analyzed for asbestos (chrysotile, amosite, crocidolite, anthophyllite, and actinolite/tremolite), fibrous non-asbestos constituents (mineral wool, paper, etc.) and nonfibrous constituents. Asbestos was identified by refractive indices, morphology, color, pleochroism, birefringence, extinction characteristics, and signs of elongation. The same characteristics were used to identify the non-asbestos constituents.

The microscopist used a stereoscope to visually estimate relative amounts of each constituent using a stereoscope to determine the volume of each constituent in proportion to the total volume of the sample.

All bulk samples were analyzed by Polarized Light Microscopy (PLM) with dispersion staining as described by the Interim Method of the Determination of Asbestos in Bulk Insulation, Federal Register, 40 CFR Ch. 1 Pt. 763, App. A to Subpart. F, July 1, 1987. This is a standard method of analysis in optical mineralogy and the currently accepted method for the determination of asbestos in bulk samples. A suspect material is immersed in a solution of known refractive index and subjected to illumination by polarized light. The characteristic color displays that result enable mineral identification. It should be noted that some ACM may not be accurately identified or quantified by PLM. As an example, the original fabrication of vinyl floor tiles routinely involved milling of asbestos fibers to extremely small sizes. As a result, these fibers may go undetected under the standard polarized light microscopy method. Transmission Electron Microscopy (TEM) is recommended for a more definitive analysis of these materials. MTGL, Inc. has no control over how the laboratory describes materials or layers of materials being analyzed. Although a minimum of three samples are collected of suspect building materials, first positive stops may be requested of the laboratory and the results of the one positive sample will be reported. All other homogeneous materials will be assumed to be positive for asbestos content.

Laboratory Quality Control Program

MTGL, Inc. only uses laboratories that maintain an in-house quality control program. This program involves blind reanalysis of ten percent of all samples, precision and accuracy controls, and use of standard bulk reference materials.

SECTION 4 ASBESTOS OBSERVATIONS AND FINDINGS

SUMMARY

Table 1: Positively Identified Materials that Contain Asbestos (ACM and ACCM) and Assessment of Material Condition (as of the date the survey was conducted). Laboratory Results can be found in Appendix 1.

Material* Description	Location*	Sample #	Approximate Quantity**	AHERA Rank***	Friability/ Material Type	Damage Category	Quantity of Contamination (If any) **	Asbestos Content
Pipe Elbow Insulation	Throughout	29, 30	10 sf	7	Friable	1	None	15%
Roof Mastic (See below note.)	Building 2 (Under Vinyl Cap Sheet on North End)	R-14	1,800	X	Non-Friable	1	None	4%

Note: Sample R14 (roof mastic) pertains only to the <u>North end of Building 2</u> under vinyl cap sheet. Sample is included with report as it is a part of the same Chain of Custody (COC) and lab report as the remainder of the samples for Bldgs. 2, 5, 7 and 9.

*Positively identified ACM and ACCM that are similar in color and texture in other locations throughout the structure and facility shall be considered as asbestos containing until further sampling/analysis determines otherwise. In the event suspect asbestos containing materials are discovered during maintenance, renovation and/or demolition that are not identified in this report, disturbance of the materials should be stopped until further assessment of the material for asbestos content can be conducted.

**MTGL, Inc. is not responsible for actual quantity of the material(s). MTGL recommends bidding contractors measure and calculate quantities for estimated abatement costs and notifications. (sf= square foot; NA= not applicable))

***Each homogeneous area of friable and non-friable asbestos-containing material (ACM) was classified into one of the following seven categories, as specified in EPA's AHERA regulations (40 CFR 763.88):

- (1) Damaged or significantly damaged thermal system insulation ACM.
- (2) Damaged friable surfacing ACM.
- (3) Significantly damaged friable surfacing ACM.
- (4) Damaged or significantly damaged friable miscellaneous ACM.
- (5) ACBM with potential for damage.
- (6) ACBM with potential for significant damage.
- (7) Any remaining friable ACBM or friable suspected ACBM.
- (X) Not applicable (material is non-friable surfacing or miscellaneous material).

The damage categories are defined as follows:

Category 1 - "Undamaged" means the material had no visible damage, or extremely minor damage or surface marring (i.e., a room full of floor tile with only two or three small corners chipped off on the tile).

Category 2 - "Damaged" means the material had visible damage evenly distributed over less than 10% of its surface, or localized over less than 25% of its surface.

Category 3 -"Significantly Damaged" means the material had visible damage that is evenly distributed over 10% or more of its surface, or localized over 25% or more if its surface.

Table 2: Materials found to be Negative for Asbestos (as of the date the survey was conducted). Laboratory results can be found in Appendix 1.

Material* Description	Sample #		
Concrete Floor	1, 2, 3		
Concrete Wall	4, 5, 6		
12"x12" Dotted Ceiling Tile	7, 8, 9		
Unfinished Drywall (Ceiling)	10, 11, 12		
Ceramic Wall Tile & Mortar	13, 14,15		
Exterior Brick & Grout	16, 17, 18		
Exterior Window Putty	19, 20, 21		
Exterior Concrete Slab	22, 23, 24		
Expansion Caulk	25, 26, 27		
Ceiling Tile Mastic	Report ID 3590834 31, 32, 33		
HVAC Seam Caulk	Report ID 3600738 31, 32, 33		
Samples R-1 through R-13 are Homogeneous to the shared roofing systems for Building 2, 5, 7 and 9.			
Silver Rolled Roofing over Insulation	R-1, R2, R3, R-4, R-5		
Roof Mastic	R-6, R-7, R-8, R-9, R-10		
HVAC Caulk	R-11. R12, R-13		

GENERAL INFORMATION

Environmental Protection Agency (EPA)

According to the South Coast Air Quality Management District's Rule 1402 paragraph (H)(2)(C), the analysis of composite samples of multi-layered material including, but not limited to, stucco (base and scratch coat) and wall systems is prohibited for the quantification of asbestos content. All separable layers shall be analyzed and reported separately for asbestos content.

These materials are eligible for analyzed using 1,000 Point Count with Gravimetric Reduction methods. Analysis would be conducted per strata and materials found to be greater than 0.1%

asbestos are regulated by OSHA and handled as asbestos containing until packaged and stored for disposal. Materials greater than 1% are regulated by EPA/APCD and would require disposal as asbestos containing material.

A material is considered by the EPA and the State of California to be asbestos-containing if at least one sample collected from the area shows asbestos present in an amount greater than one percent (>1%).

California Occupational Safety & Health Agency (Cal/OSHA)

Title 8, California Code of Regulation 1529 defines asbestos-containing construction materials as materials containing greater than one-tenth of one percent (0.1%) asbestos by weight. Under this code, materials containing between 0.1% and 1% asbestos are regulated as other regulated operations. Although operations involving materials containing between 0.1% and 1% asbestos are not considered Class I, II, or III work, several sections of the standard are applicable, including negative exposure assessments and the use of regulated areas.

Laboratory analysis may report materials as "Trace Asbestos". These materials are assumed to be greater than 0.1%. Upon client request, these materials can be analyzed using 1,000 Point Count with Gravimetric Reduction methods. Materials found to be greater than 0.1% asbestos are regulated by OSHA and handled as asbestos containing until packaged and stored for disposal.

Please refer to the laboratory analysis for a more detailed description of the microscopic analysis of these samples.

Asbestos-containing materials (ACM) are regulated by federal, state, and local agencies, which include but may not be limited to the following:

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) requires an inspection for asbestos be done on facilities that are to undergo demolition or renovation work. Materials found to contain asbestos may need to be removed prior to the start of such demolition/renovation work.

NESHAP defines Category I non-friable asbestos-containing materials as gaskets, resilient floor covering, and asphalt roofing products that contain more than one percent asbestos, and Category II non-friable as any materials, except for Category I non-friable, that contain more than one percent asbestos and cannot be reduced to a powder by hand pressure when dry. NESHAP defines a Regulated Asbestos-Containing Material (RACM) as: (a) friable ACM, (b) Category I non-friable that has become friable, (c) Category I non-friable that has or may be subject to sanding, grinding, cutting, or abrading, and (d) Category II non-friable that may or has become friable during demolition or renovation.

SECTION 5 CONCLUSIONS & RECOMMENDATIONS

CONCLUSIONS

On this asbestos survey, materials observed and tested for asbestos were positive for asbestos content.

The pipe elbow insulation was reported to contain >1% asbestos.

While the silver coated rolled roofing and roofing mastic is negative for asbestos on Building 5, sample R14 (roof mastic) pertains only to North end of Building 2 under vinyl cap sheet. The sample is included with report as it is a part of the same Chain of Custody (COC) and lab report as the remainder of the samples for Buildings 2, 5, 7 and 9.

RECOMMENDATIONS

If during renovation activities, materials other than the ones discussed in this report are observed, the materials should be tested for asbestos content prior to disturbance.

General

MTGL recommends that all asbestos containing materials be removed prior to any renovation and/or demolition activities, which may impact the materials. A Licensed Abatement Contractor in the State of California should perform the removal activities.

Removal of ACM/ACCM should be conducted in accordance with EPA and OSHA requirements for Federal, State and Local rules and regulations. All asbestos removal should be conducted using wet methods and engineering controls to reduce airborne fiber concentrations. OSHA required personal protective equipment must be used for worker protection.

All activities that may disturb or disrupt asbestos containing material must be conducted in properly demarcated regulated areas using wet removal methods.

Proper decontamination methods must be used by all workers entering and leaving regulated work areas where asbestos containing materials are being removed.

In the event ACM or ACCM materials are observed to be damaged and/or visible contamination is present, isolate the immediate area, turn off HVAC systems. Only properly trained and certified workers may enter the work area to conducted clean-up activities using wet methods.

If renovation and/or demolition activities do not impact the asbestos containing materials, then the materials can be managed in place. Periodic surveillance is recommended. An Operations & Maintenance (O&M) program should be established and conducted by properly trained personnel. Minimum training for each type of material that has been identified should be given as required by Cal/OSHA. Additionally, postings would be required in all publicly accessible areas warning of the potential hazard to satisfy the Proposition 65 & Hazard Communication regulations.

SECTION 6 APPENDICES

APPENDIX 1 ASBESTOS LABORATORY RESULTS & CHAIN OF CUSTODY



Report for:

Mr. Carl Tucker MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126

Eurofins EPK Built Environment Testing, LLC Project: Vanir Const. - OC Juvenile Hall; 331 The City of Orange - B5 Regarding:

EMĹ ID: 3590834

Approved by:

Dates of Analysis: Asbestos PLM: 04-03-2024

Approved Signatory Carlos Rivadeneyra

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267) NVLAP Lab Code 500034-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Date of Sampling: 03-27-2024 Date of Receipt: 03-29-2024 Date of Report: 04-03-2024

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of Orange - B5

ASBESTOS PLM REPORT

Total Samples Submitted: 32 **Total Samples Analyzed:** 31 **Total Samples with Layer Asbestos Content > 1%:**

Lab ID-Version 1: 17559050-1

Lab ID-Version : 17559051-1

EMLab ID: 3590834, Page 2 of 9

Location: 1. Concrete Floor

	•	
Sample Layers	Asbestos Content	
Gray Concrete	ND	
Green Concrete	ND	
Sample Composite Homogeneity: Moderate		

Location: 2. Concrete Floor

20041011 2, 00110101		
Sample Layers	Asbestos Content	
Gray Concrete	ND	
Green Concrete	ND	
Sample Composite Homogeneity: Moderate		

Location: 3, Concrete Floor	Lab ID-Version‡: 17559052-1	
Sample Layers	Asbestos Content	
Gray Concrete	ND	
Green Concrete	ND	
Sample Composite Homogeneity: Moderate		

Location: 4. Concrete Wall

Location: 4, Concrete Wall	Lab ID-Version‡: 17559053-1
Sample Layers	Asbestos Content
Gray Plaster	ND
White Skim Coat	ND
Beige Paint	ND
Sample Composite Homogeneity:	Poor

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

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Lab ID-Version‡: 17559054-1

EMLab ID: 3590834, Page 3 of 9

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange - B5

Date of Sampling: 03-27-2024 Date of Receipt: 03-29-2024 Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Location: 5, Concrete Wall

Sample Layers	Asbestos Content	
Gray Plaster	ND	
White Skim Coat	ND	
Beige Paint	ND	
Sample Composite Homogeneity: Poor		

Location: 6, Concrete Wall	Lab ID-Version‡: 17559055-1
Sample Layers	Asbestos Content
Gray Plaster	ND
White Skim Coat	ND
Beige Paint	ND
Sample Composite Homogeneity:	Poor

Location: 7, 12"x12" Dotted Ceiling Tile

Location: 7, 12"x12" Dotted Ceiling Tile	Lab ID-Version‡: 17559056-1
Sample Layers	Asbestos Content
Gray Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	85% Cellulose
•	10% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 8, 12"x12" Dotted Ceiling Tile

Location: 8, 12"x12" Dotted Ceiling Tile	Lab ID-Version‡: 17559057-1
Sample Layers	Asbestos Content
Gray Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	85% Cellulose
_	10% Glass Fibers
Sample Composite Homogeneity:	Good

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Lab ID-Version †: 17559060-1

EMLab ID: 3590834, Page 4 of 9

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange - B5

Date of Sampling: 03-27-2024 Date of Receipt: 03-29-2024 Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Location: 9, 12"x12" Dotted Ceiling Tile

Location: 9, 12"x12" Dotted Ceiling Tile	Lab ID-Version‡: 17559058-1
Sample Layers	Asbestos Content
Gray Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	85% Cellulose
_	10% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 10, Unfinished Drywall	Lab ID-Version‡: 17559059-1
Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	10% Cellulose
_	3% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 11 Unfinished Drywall

Location: 11, Chimshed Diywan	240 12 (01510114, 1700) 000 1
Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	10% Cellulose
-	3% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 12, Unfinished Drywall	Lab ID-Version‡: 17559061-1
Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	10% Cellulose
_	3% Glass Fibers
Sample Composite Homogeneity:	Good

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

9445 Farnham Street, Suite 103, San Diego, CA 92123

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Lab ID-Version‡: 17559062-1

Lab ID-Version : 17559065-1

Lab ID-Version 1: 17559066-1

EMLab ID: 3590834, Page 5 of 9

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange - B5

Date of Sampling: 03-27-2024 Date of Receipt: 03-29-2024 Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Location: 13, Ceramic Wall Tile and Mortar

Sample Layers	Asbestos Content
Gray Mortar	ND
Pink Ceramic Tile	ND
Sample Composite Homogeneity: Moderate	

Location: 14, Ceramic Wall Tile and Mortar

Lab ID-Version 1: 17559063-1 Sample Layers **Asbestos Content** Gray Mortar ND Pink Ceramic Tile ND Sample Composite Homogeneity: | Moderate

Location: 16, Exterior Brick and Grout

Sample Layers	Asbestos Content
Gray Grout	ND
Red-Brown Brick	ND
Sample Composite Homogeneity: Moderate	

Location: 17, Exterior Brick and Grout

Sample Layers	Asbestos Content
Gray Grout	ND
Red-Brown Brick	ND
Sample Composite Homogeneity: Moderate	

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

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Lab ID-Version 17559069-1

EMLab ID: 3590834, Page 6 of 9

Client: MTGL, Inc. C/O: Mr. Carl Tucker Re: Vanir Const. - OC Juvenile Hall; 331 The City of Orange - B5

Date of Receipt: 03-29-2024 Date of Report: 04-03-2024

Date of Sampling: 03-27-2024

ASBESTOS PLM REPORT

Location: 18, Exterior Brick and Grout

1: 18, Exterior Brick and Grout	Lao ID- version ₄ : 1/33900/-1
Sample Layers	Asbestos Content
Gray Grout	ND
Red-Brown Brick	ND
Sample Composite Homogene	eity: Moderate

Location, 10 Extension Window Dutter

Location: 19, Exterior William Putty	Lab ID- Version ₄ : 1/339008-1
Sample Layers	Asbestos Content
Gray Window Putty	ND
Sample Composite Homogeneity:	Good

Location: 20. Exterior Window Putty

Sample Layers	Asbestos Content
Gray Window Putty	ND
Sample Composite Homogeneity:	Good

Location: 21, Exterior Window Putty	Lab ID-Version‡: 17559070-1
Sample Layers	Asbestos Content
Gray Window Putty	ND
Sample Composite Homogeneity:	Good

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

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Lab ID-Version : 17559071-1

Lab ID-Version 17559073-1

Lab ID-Version †: 17559074-1

EMLab ID: 3590834, Page 7 of 9

Date of Sampling: 03-27-2024 Date of Receipt: 03-29-2024 Date of Report: 04-03-2024

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange - B5

ASBESTOS PLM REPORT

Location: 22, Exterior Concrete Slab

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 23, Exterior Concrete Slab	Lab ID-Version‡: 17559072-1
Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 24, Exterior Concrete Slab

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 25 Expansion Caulk

Location: 25, Expansion Caulk	Euo 15 () () () () () ()
Sample Layers	Asbestos Content
Gray Caulk	ND
Sample Composite Homogeneity:	Good

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

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Lab ID-Version : 17559075-1

Lab ID-Version †: 17559079-1

Client: MTGL, Inc. C/O: Mr. Carl Tucker Re: Vanir Const. - OC Juvenile Hall; 331 The City of

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Date of Sampling: 03-27-2024 Date of Receipt: 03-29-2024 Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Location: 26, Expansion Caulk

Sample Layers	Asbestos Content
Gray Caulk	ND
Sample Composite Homogeneity:	Good

Location: 28, Pipe Elbow Insulation	Lab ID-Version‡: 17559077-1
Sample Layers	Asbestos Content
Yellow Insulation	ND
Beige Woven Material	ND
Composite Non-Asbestos Content:	75% Cellulose
	20% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 29, Pipe Elbow Insulation	Lab ID-Version‡: 17559078-1
Sample Layers	Asbestos Content
Beige Fibrous Material	15% Chrysotile
Yellow Insulation	ND
Beige Woven Material	ND
Composite Non-Asbestos Content:	60% Cellulose 20% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 30 Pina Flhow Inculation

Location: 50, 1 tpc Endow Insulation	East 15 Version 4. 17555075 1
Sample Layers	Asbestos Content
Beige Fibrous Material	15% Chrysotile
Sample Composite Homogeneity:	Good

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

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Client: MTGL, Inc. C/O: Mr. Carl Tucker Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange - B5

Date of Sampling: 03-27-2024 Date of Receipt: 03-29-2024 Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Location: 31, Ceiling Tile Mastic

Sample Layers	Asbestos Content
Brown Fibrous Material	ND
Brown Mastic	ND
Yellow Mastic	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

Location: 32, Ceiling Tile Mastic

Lab ID-Version 1: 17559081-1

Lab ID-Version‡: 17559080-1

Sample Layers	Asbestos Content
Yellow Mastic	ND
Sample Composite Homogeneity:	Good

Location: 33, Ceiling Tile Mastic

Lab ID-Version 17559082-1

EMLab ID: 3590834, Page 9 of 9

Sample Layers	Asbestos Content
Yellow Mastic	ND
Sample Composite Homogeneity:	Good

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

CHAIN OF CUSTODY 💸 eurofins

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Built Environment Testing

Fog Rain Snow Wind Clear WEATHER None LEVEL Light Moderate Heavy

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East: (866) 871-1984 Central: (800) 651-4802 Built Environment Testing

WEATHER		Fog	Rain	Snow	Wind	Ciea
	None					
ಥ	Light					
ių.	Moderate					
-	Heavy					

REQUE

003590834

Spore Tape BioCauset Trap Sweb Bulk Sweb Was

Non-Culturable

/est: (866) 888-6653	Inchiy	Trap Sweb, Bulk Sweb, 77-3. Contact Plate
CONTACT INFORM	ATION	a a
ompany: IMTGLITIK. Address: Special Inst contact: CARLTUCKU X St hone: 619-454-7851	742 Arjons DR., San Diago, CA Positur Stap 7 190	ant Asp app.) Asp app.) An and Surface Backer Annoe) An Count (NIOSH 740
PROJECT INFORMATION	TURN AROUND TIME CODES - (TAT)	Estwell Estwel
roject ID Vanir Coust Oc Juvenile Hall roject escription: 331 The City of cronge - B5 roject p Code: 92868 Sampling: 5:3/27/24 D Number: 508-24-061.107 By	STD - Standard (Default) ND - Next Business Day SD - Same Business Day WH - Weekend/Holiday/ASAP Rushes received after 2pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.	a Analysis oncopic Exam (Quarizo oncopic Exam (Quarizo onspec count direct exerterization) and Eurogi (Genus ID + and Counts (Culturate outure outure outure outure outure outure An And Arborne F sults - PLM Flame AA Fla
SAMPLE ID DESCRIPTION Type (Below	TAT Volume/Area (Above) (as applicable) (Time of day, Temp, RH, etc.)	Spore Trap Spore Trap Spore Trap Other biol Durantisativ Dual Chara Dual Chara Culturable Gram State Caponelia Cupturiff of Chara Ashestos I cap (Pb) PCR (pleas Alegens (
18 19 20 21 22 24 25 24 25 24 25 24 26 27 Pipe Elbow Insulabor	J Sidewalk Mech Rm	
30 +	+	
SAMPLE TYPE CODES	RELINQUISHED BY DATE & TIME	RECEIVED BY DATE & TIME
C - BioCassette CP - Contact Plate T - Tape O - Other 15 - Andersen ST - Spore Trap SW - Swiib AS - Surface Air Sampler B - Bulk SO - Soil IP - Non-potable Water P - Potable Water D - Dust	Michelle Chreston 3/28/24	C2 31291

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Ceiling Tile Mastic Copyright 2022 EUROFINS EPK BUILT ENVIRONMENT TESTING, LLC

EM-CS-F-1192 , R36, Dec 2022, Page 1 of



Report for:

Mr. Carl Tucker MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126

Eurofins EPK Built Environment Testing, LLC Project: Vanir Const. - OC Juvenile Hall; 331 The City of Orange B2, 5, 7, and 9 Regarding:

EMĹ ID: 3600732

Approved by:

Dates of Analysis: Asbestos PLM: 04-11-2024

Approved Signatory Carlos Rivadeneyra

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267) NVLAP Lab Code 500034-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

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9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Date of Sampling: 04-02-2024 Date of Receipt: 04-08-2024 Date of Report: 04-11-2024

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B2, 5, 7, and 9

ASBESTOS PLM REPORT

Total Samples Submitted: 16 **Total Samples Analyzed:** 16 **Total Samples with Layer Asbestos Content > 1%:**

Lab ID-Version 1: 17610976-1

Lab ID-Version 1: 17610977-1

Lab ID-Version 1: 17610978-1

EMLab ID: 3600732, Page 2 of 6

Location: R-1. Silver Rolled Roofing Over Insulation - 7

Sample Layers	Asbestos Content
Brown Fibrous Material	ND
Black Roofing Felt 3	ND
Black Roofing Felt 2	ND
Black Roofing Felt 1	ND
Black/White Roofing Material	ND
Composite Non-Asbestos Content:	20% Glass Fibers 10% Cellulose
Sample Composite Homogeneity:	Poor

Location: R-2, Silver Rolled Roofing Over Insulation - 9

Sample Layers	Asbestos Content
Brown Fibrous Material	ND
Black Roofing Tar and Felt	ND
Black Roofing Felt	ND
Black/White Roofing Material	ND
Composite Non-Asbestos Content:	20% Glass Fibers 10% Cellulose
Sample Composite Homogeneity:	Poor

Location: R-3, Silver Rolled Roofing Over Insulation - 5

Sample Layers	Asbestos Content
Brown Fibrous Material	ND
Black Roofing Tar and Felt 3	ND
Black Roofing Tar and Felt 2	ND
Black Roofing Tar and Felt 1	ND
Black/White Roofing Material	ND
Composite Non-Asbestos Content:	20% Glass Fibers
-	10% Cellulose
Sample Composite Homogeneity:	Poor

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Lab ID-Version‡: 17610979-1

EMLab ID: 3600732, Page 3 of 6

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B2, 5, 7, and 9

Date of Sampling: 04-02-2024 Date of Receipt: 04-08-2024 Date of Report: 04-11-2024

ASBESTOS PLM REPORT

Location: R-4, Silver Rolled Roofing Over Insulation - 2

Sample Layers	Asbestos Content
Brown Fibrous Material	ND
Black Roofing Tar and Felt 2	ND
Black Roofing Tar and Felt 1	ND
Black/White Roofing Material	ND
Composite Non-Asbestos Content: 20% Glass Fibers 10% Cellulose	
Sample Composite Homogeneity:	Poor

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Lab ID-Version‡: 17610980-1

Lab ID-Version 1: 17610981-1

EMLab ID: 3600732, Page 4 of 6

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B2, 5, 7, and 9

Date of Sampling: 04-02-2024 Date of Receipt: 04-08-2024 Date of Report: 04-11-2024

ASBESTOS PLM REPORT

Location: R-5, Silver Rolled Roofing Over Insulation - 2

Sample Layers	Asbestos Content	
Brown Fibrous Material	ND	
Black Roofing Tar and Felt 3	ND	
Black Roofing Tar and Felt 2	ND	
Black Roofing Tar and Felt 1	ND	
Black/White Roofing Material	ND	
Composite Non-Asbestos Content: 20% Glass Fibers		
	10% Cellulose	
Sample Composite Homogeneity:	Poor	

Location: R-6, Roof Mastic - 9

Sample Layers	Asbestos Content
Black Roofing Mastic	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: R-7, Roof Mastic - 7	Lab ID-Version‡: 17610982-1
Sample Layers	Asbestos Content
Black Roofing Mastic	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Lacation, D. Q. Doof Mostic 5

Location: K-8, Kool Mastic - 5	Lab ID- version ₄ : 1/610983-1
Sample Layers	Asbestos Content
Black Roofing Mastic	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

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C/O: Mr. Carl Tucker Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B2, 5, 7, and 9

Client: MTGL, Inc.

Date of Sampling: 04-02-2024 Date of Receipt: 04-08-2024 Date of Report: 04-11-2024

ASBESTOS PLM REPORT

Location: R-9, Roof Mastic - 5 Lab ID-Version‡: 17610984-1

Sample Layers	Asbestos Content
Black Roofing Mastic	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: R-10, Roof Mastic - 2

Lab ID-Version 1: 17610985-1

Sample Layers	Asbestos Content
Black/White Roofing Mastic	ND
Composite Non-Asbestos Content:	10% Cellulose
-	10% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: R-11, HVAC Caulk/Tape - 7

Lab ID-Version : 17610986-1

Sample Layers	Asbestos Content
Brown/Black Non-Fibrous Material	ND
Gray/White Caulk	ND
Sample Composite Homogeneity:	Poor

Location: R-12, HVAC Caulk/Tape - 5

Lab ID-Version 1: 17610987-1

EMLab ID: 3600732, Page 5 of 6

Sample Layers	Asbestos Content		
Gray/White Caulk	ND		
Sample Composite Homogeneity: Moderate			

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 \ddagger A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

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Lab ID-Version : 17610988-1

Lab ID-Version 1: 17610989-1

Lab ID-Version 1: 17610990-1

Lab ID-Version 1: 17610991-1

EMLab ID: 3600732, Page 6 of 6

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B2, 5, 7, and 9

Date of Sampling: 04-02-2024 Date of Receipt: 04-08-2024 Date of Report: 04-11-2024

ASBESTOS PLM REPORT

Location: R-13, HVAC Caulk/Tape - 2

Sample Layers	Asbestos Content	
Gray/White Caulk	ND	
Sample Composite Homogeneity: Moderate		

Location: R-14, Vinvl Cap Sheet - B2

Sample Layers	Asbestos Content			
Green Mastic	ND			
Gray Fibrous Material	ND			
White Non-Fibrous Material	ND			
Composite Non-Asbestos Content: 15% Synthetic Fibers				
Sample Composite Homogeneity:	Poor			

Location: R-15, Vinyl Cap Sheet - B2

	·
Sample Layers	Asbestos Content
White Fibrous Material	ND
White Non-Fibrous Material	ND
Composite Non-Asbestos Content:	15% Synthetic Fibers
Sample Composite Homogeneity:	Poor

Location: R-16, Vinvl Cap Sheet - B2

Location: It 10, viny! cap sheet D2			
Sample Layers	Asbestos Content		
Black Mastic	4% Chrysotile		
Green Mastic	ND		
White Fibrous Material	ND		
White Non-Fibrous Material	ND		
Composite Non-Asbestos Content:	15% Synthetic Fibers		
Sample Composite Homogeneity:	Poor		

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 \ddagger A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

CHAIN OF CUSTODY 💸 eurofins	WEATHER Foo Rain	Snow Wind Clear	7.00.00	
www.eurofinsus.com/Built Built Environment East: (866) 871-1984 Central: (800) 651-4802 West: (866) 888-6653		THE CHAIN	Non-Culturable Spoxe Tape, Trap Swab, Busk Swab, V 0036	600732
PROJECT INFORMATION Project ID Vanir Coxst Oc Juvenile Hall stroked 331 The City of Grounge B-2,5,8 Project ID Sampling	TURN AROUND TIME CODES		vels verticles - supplement ic Exam (Qualitative) e count direct exam attor Fungi (Genus ID + Asp. spp.) ngi (Genus ID + Asp. spp.) counts (Cuturable Air and Surface Becter) ogé (Presence: Absence) ge Sorten	I specify lest) PCM Airborne Fiber Court (NIOSH 7400) PLM refly test) e specify (est)
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BC - BioCassette CP - Contact Plate T - Tape O - Other: A1S - Andersen ST - Spore Trap SW - Swab SAS - Surface Air Sampler B - Bulk SO - Soil	Michelle Christin		C S	4 (812

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CHAIN OF CUSTODY : eurofins

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		CONTA	CT INFORMA	TION								100	9	H	H	6	П		
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Contact: CARLT	ucker		Special Instru	ictions	Arjons DR	,	5192126		Ш		-	1	5	Н		SOS.			
Phone 619-48	4-7851						9				als o	Spp.	0.00	- R		Count (NIOSH	Н		
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1S - Andersen	ST - Spore Trap	SW - Swab		110	Gechelle	hulta	11-1-1					-				6	24	50	9
SAS - Surface Air Sampler	B - Bulk	SO - Soil			/														
NP - Non-potable Water	P - Potable Water	D - Dust																	



Report for:

Mr. Carl Tucker MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126

Eurofins EPK Built Environment Testing, LLC Project: Vanir Const. - OC Juvenile Hall; 331 The City of Orange B5 Regarding:

EMĹ ID: 3600738

Approved by:

Dates of Analysis: Asbestos PLM: 04-11-2024

Approved Signatory Carlos Rivadeneyra

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267) NVLAP Lab Code 500034-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

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Eurofins EPK Built Environment Testing, LLC

9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Date of Sampling: 04-02-2024 Date of Receipt: 04-08-2024 Date of Report: 04-11-2024

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B5

ASBESTOS PLM REPORT

Total Samples Submitted: 3 **Total Samples Analyzed:** 3 **Total Samples with Layer Asbestos Content > 1%:** 0

Lab ID-Version 1: 17610923-1

EMLab ID: 3600738, Page 2 of 2

Location: 31. HVAC Seam Caulk

200000000000000000000000000000000000000	· · · · · · · · · · · · · · · · · · ·
Sample Layers	Asbestos Content
Gray Caulk	ND
Sample Composite Homogeneity:	Good

Location: 32, HVAC Seam Caulk	Lab ID-Version‡: 17610924-1
Sample Layers	Asbestos Content
Gray Caulk	ND
Sample Composite Homogeneity:	Good

Location: 33, HVAC Seam Caulk	Lab ID-Version‡: 17610925-1
Sample Layers	Asbestos Content
Gray Caulk	ND
Sample Composite Homogeneity:	Good

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CHAIN OF CUSTODY 💸 eurofins

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BC - BioCassette

A15 - Andersen

SAS - Surface Air Sampler

Built Environment Testing

O - Other:

T - Tape

SW - Swab

SO - Soil

CP - Contact Plate

ST - Spore Trap

B - Bulk

Fog Rain Snow Wind Clear WEATHER None LEVEL Light Moderate Heavy

REQUE Non-Culturable

BioCassett

entral; (800) 651-480 est: (866) 888-6653	CONTA	CT INFORMA			C 2:						Bacteria)	Norwe :		H 7400)			
company: IMT contact: CAP thone: 619-	GLIENC. LTUCKUL 454-7851	Address 7 Special Instru	742 F		.,San Diego, g		tion.	9		- Asp spp.	(Genus ID + Asp 19pp.) unts (Culturable Air and Surface	sence		ber Count (NIOSH 7400)			
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SAMPLE ID	DESCRIPTION	Sample Type (Below)	TAT (Aboye)	Total Volume/Area (as applicable)	NOTES (Time of day, Temp,	, RH, etc.)	Spore T	Other blood Direct Micr	Dust Charat	1-Media	Cutturable A Gramt Stain	Legionella Total Collec	Quantit	Asbestt	Asbestos	PCR (plear	Allerge
31233	AVAC Stapp Caule	B .	1,1												7		
	SAMPLE TYPE CODES			RELINQUISH	ED BY DA	ATE & TIME			R	ECE	IVED	ВУ			DATE	8 T	

United States Department of Commerce National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 500034-0

Eurofins EMLab P&K

San Diego, CA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2024-01-01 through 2024-12-31

Effective Dates



For the National Voluntary Laboratory Accreditation Program



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Eurofins EMLab P&K

9445 Farnham St #103 San Diego, CA 92123 Quynh Nguyen Phone: 800-651-4802

Email: quynh.nguyen@et.eurofinsus.com https://www.eurofinsus.com/environment-testing/

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 500034-0

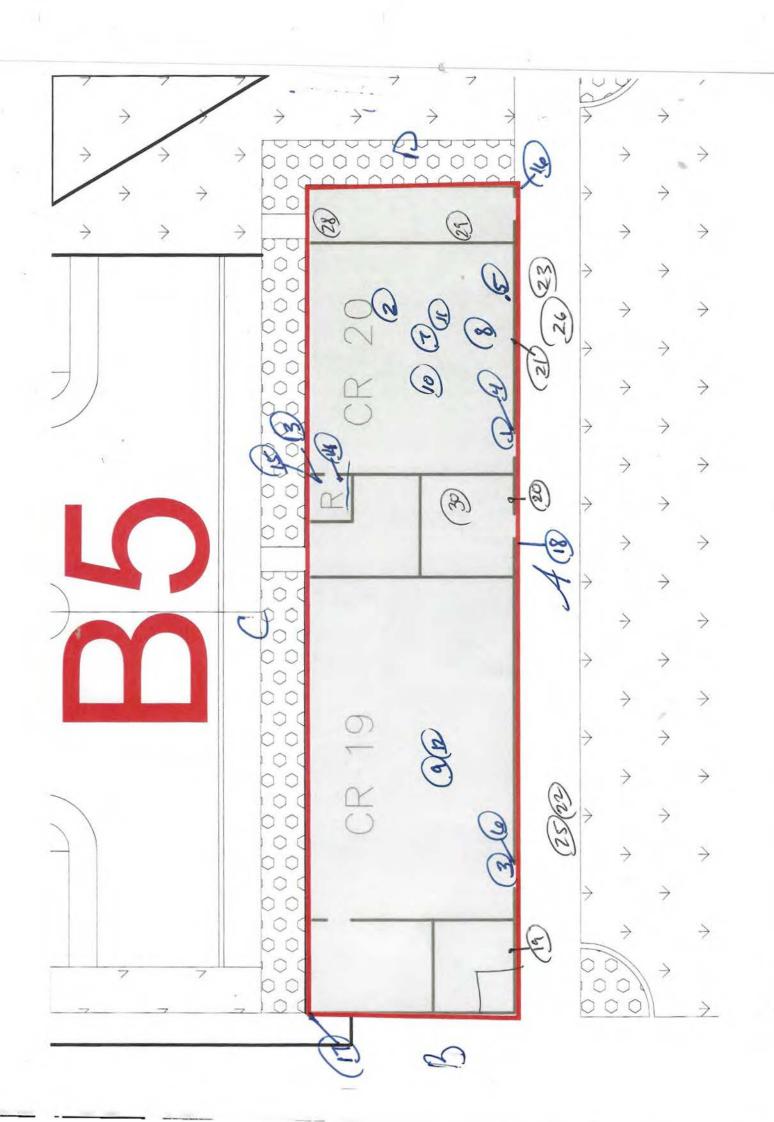
Bulk Asbestos Analysis

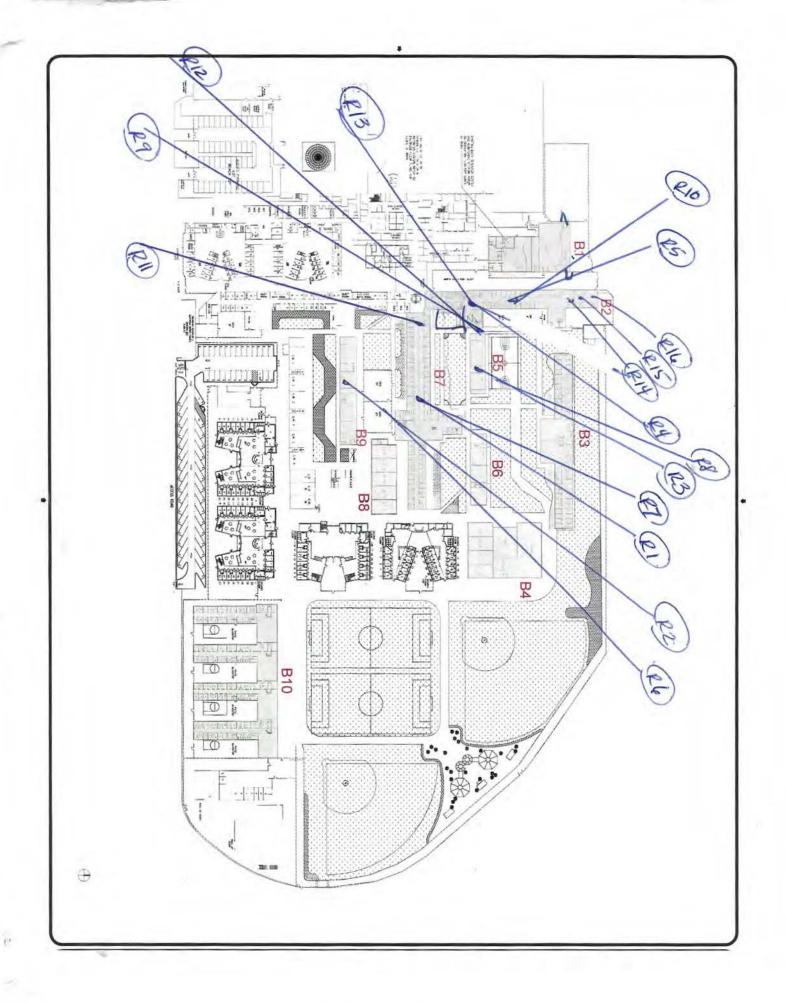
<u>Code</u>	<u>Description</u>
18/A01	EPA 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

For the National Voluntary Laboratory Accreditation Program

APPENDIX 2

SAMPLE LOCATION MAP (NOT TO SCALE)





APPENDIX 3 PHOTO DOCUMENTATION

Building 5



1. Typical view of classroom.



2. View of Classroom.



3. View of kitchenette with ceramic

tile.

APPENDIX 4 INSPECTOR CERTIFICATIONS

California Certified Asbestos Consultant (CAC)

Card Holder: <u>Michelle Ehresman</u>

Certification Number: <u>14-5323</u> Exp.: <u>11/19/2024</u>

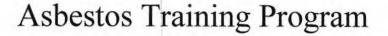
Current Employer: MTGL, Inc.

Supporting Certifications:

AHERA Contractor/Supervisor Refresher Certification
 AHERA Building Inspector Refresher Certification
 AHERA Management Planner Refresher Certification
 AHERA Project Designer Refresher Certification
 Exp. 7/27/2024
 Exp. 7/27/2024
 Exp. 8/16/2024



MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126 858-537-3999



This is to certify

Michelle Ehresman 1656

Has successfully completed 8 hours of formal training required by section 206 of TSCA II entitled

Contractor/Supervisor Refresher

Presented By **Environmental Compliance Training** PO BOX 16555 San Diego, CA. 92176-6555

(858) 558-7465

Director:

Walter T. Amenta, CIH, Approval Number CA-029-04

Class Dates:

06-24-2023

Exam Date:

n/a

Expiration Date: 06-24-2024

Certification Number: 0623ABCA167303

Certificate Of Completion

Asbestos Building Inspector Refresher Course

DOSH #: CA-015-06

Michelle Ehresman

ABIR0727230010N35227

David Wallach

Principal Instructor

7/27/2023

Course Start Date

7/27/2023

Course End Date

Michael W. Horner

Training Director

7/27/2023 Exam Date 7/27/2024

Expiration Date

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



NATEC International, Inc.

National Association of Training and Environmental Consulting



TIONAL 1100 Technology Circle, Suite A, Anaheim, CA 92805 · www.natecintl.com · 800-969-3228

Important Industry Contacts

CAL-OSHA:

Ph# (916) 574-2993

(916) 483-0572 Fax Notification Web: www.dir.ca.gov or calosha.com

CDPH/CLPPB:Ph# (510) 620-5600

Web: www.cdph.ca.gov/programs/CLPPB

SCAQMD:

Ph# (909) 396-3739

Fax#(909) 396-3342

BAAOMD:

Ph# (415) 749-4762

NATEC International, Inc.

National Association of Training and Environmental Consulting

Asbestos · Lead · Mold · HAZWOPER

PO Box 8657, Fountain Valley, CA 92728 (714) 678-2750, (800) 969-3228, Fax (714) 678-2757 www.natecintl.com

NATEC International, Inc.

National Association of Training and Environmental Consulting

This Card Acknowledges That Michelle Ehresman

Holds Training Certification For Asbestos Building Inspector Refresher Course

Expiration: 7/27/2024

ABIR0727230010N35227

Michael W. Horner Training Director

Certificate Of Completion

Asbestos Project Designer Refresher Course

DOSH #:CA-015-10

Michelle Ehresman

APDR0816230004N35415

Norm Kramer

Principal Instructor

8/16/2023 Course Start Date 8/16/2023

Course End Date

8/16/2023

Exam Date

Michael W. Horner

Training Director

8/16/2024

Expiration Date

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



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NATEC International, Inc.

National Association of Training and Environmental Consulting
*Note: Card is not suitable substitute for certificate and is not accepted by SCAQMD as proof of
certification
This Card Askinguidades That

This Card Acknowledges That Michelle Ehresman

Holds Training Certification For Asbestos Project Designer Refresher Course

Expiration: 8/16/2024

Training Date 8/16/2023 APDR0816230004N35415

Michael W. Horner Training Director

Certificate Of Completion

Asbestos Management Planner Refresher Course

DOSH #:CA-015-08

Michelle Ehresman

AMPR0727230007N35357

David Wallach

Principal Instructor

7/27/2023

Course Start Date

7/27/2023

Course End Date

7/27/2023 Exam Date

Training Director

Michael W. Horner

7/27/2024 **Expiration Date**

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



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NATEC International, Inc.

National Association of Training and Environmental Consulting

This Card Acknowledges That Michelle Ehresman

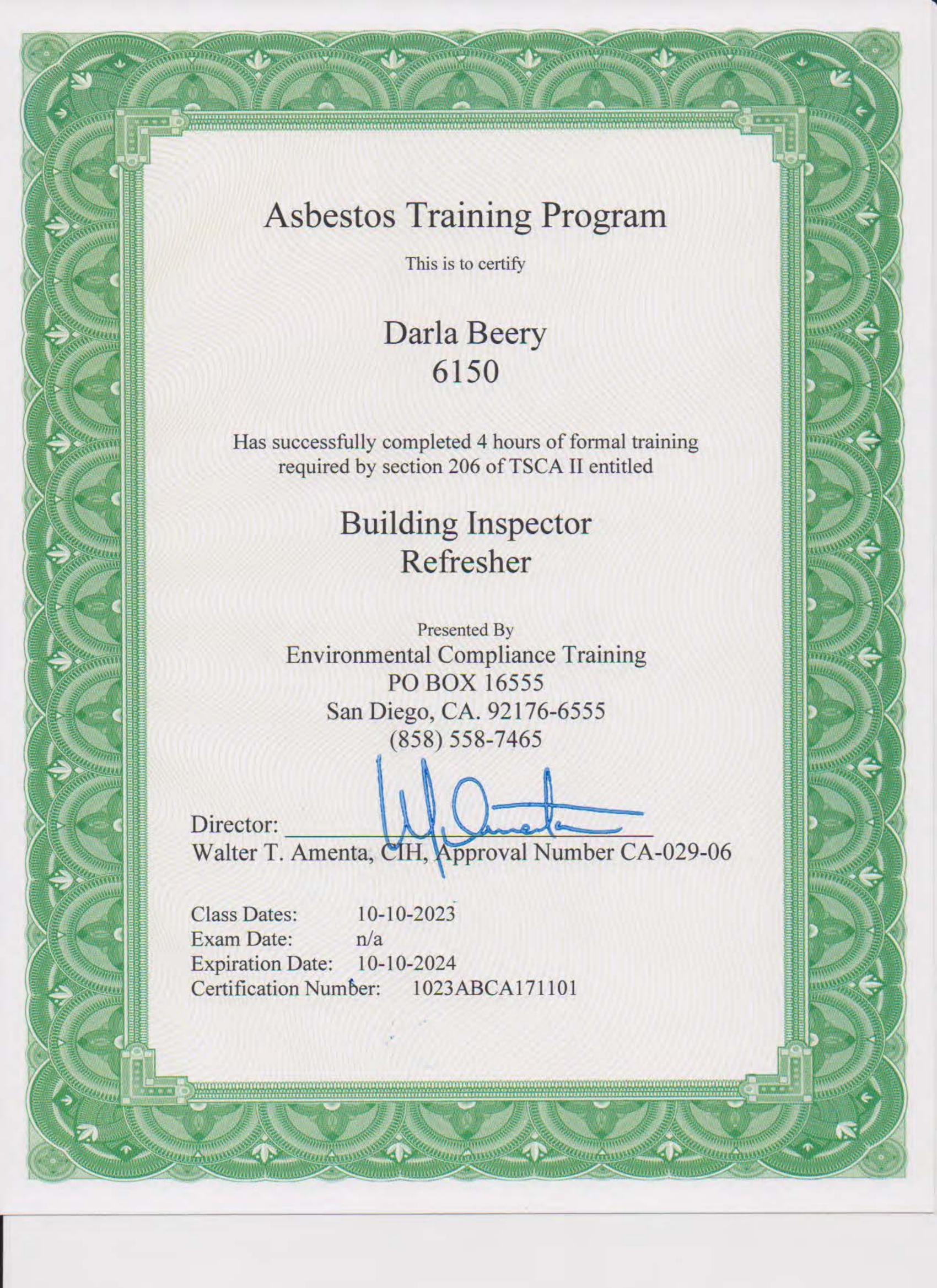
Holds Training Certification For Asbestos Management Planner Refresher Course

Expiration: 7/27/2024

7/27/2023 Training Date AMPR0727230007N35357 Certificate No.

Michael W. Homer Training Director

Darla Beery AHERA Building Inspector Certification



LEAD-BASED PAINT INSPECTION REPORT

Juvenile Hall-Building 5-Classrooms 19-20 331 The City Drive, S Orange, California 92868

Prepared for:

Vanir Construction 4540 Duckhorn Drive, Suite 300 Sacramento, California 95834

Prepared by:

MTGL, Inc. 7742 Arjons Drive San Diego, California 92126 858-537-3999

Project Number:

SDPE-24-061.1CT

Michelle Ehresman, CAC, LIA/LPM, ICRA Certification Number: CDPH# 0458/0459

Report Issuance Date: April 18, 2024

TABLE OF CONTENTS

SECTION

INTRODUCTION	
General Information	
Authorization Performance	
Terrormance	
WARRANTY	
METHODOLOGY	
General References	
Lead Sampling Procedures Performance Characteristic Sheets	
renormance Characteristic Sheets	
SUMMARY of FINDINGS	
Lead-Based Paint Summary	
HAZARD CONTROL AND ABATEMENT OPTIONS & LEAD SAFE WORK PRACTICES	
LEAD BASED PAINT DISCLOSURE	
APPENDICES	
Appendix 1 –XRF Data Report and Performance Characteristic Sheet	
Appendix 2 – Site Drawing	
Appendix 3 – Glossary	
Appendix 4 – Inspector Certification	
Appendix 5 – CDPH 8552 Form	
Appendix 6 – Renovate Right	

GENERAL INFORMATION

MTGL was retained by Vanir Construction to conduct a lead-based paint inspection at the subject property located at 331 The City Drive in Orange, California 92868. All inspections were in accordance with the guidelines set forth in the U.S. Department of Housing and Urban Development. This document is prepared for the sole use of Vanir Construction and/or any Regulatory or Governmental agencies that may directly become involved with this project.

MTGL's scope of work was limited to the following Client specified locations at the property:

- Building 5 (Single story, wood frame with brick and grout on a concrete slab.)
 - o Classrooms 19, 20

PURPOSE

The purpose of this inspection is to identify and assess painted components at the subject location above specified regulatory action levels within the Client specified scope of work.

AUTHORIZATION

Authorization to perform the survey was given by Mr. Scott Battles with a notice to proceed via proposal SDPE-24-061.1CT.

PERFORMANCE

All visual inspections and component testing was performed in accordance with Federal, State and local requirements. The inspection was performed by Michelle Ehresman, a California Certified Lead Inspector/Assessor on March 27, 2024.

LEAD-BASED PAINT SURVEY

MTGL, Inc. warrants that the findings contained herein have been prepared with the level of care and skill exercised by experienced and knowledgeable environmental consultants who are appropriately licensed or otherwise trained to perform lead-based paint assessments pursuant to the scope of work required on this project.

MTGL, Inc. warrants that the findings contained herein have been prepared in general accordance with accepted professional practices as applied by similar professionals in the community at the time of its preparation. Changes in the state of the art or in applicable regulations cannot be anticipated and have not been addressed in this report.

The survey included the inspection of accessible materials only. MTGL did not inspect or sample inaccessible areas such as behind walls or within ductwork and did not dismantle any part of the structure to survey inaccessible areas. For the purpose of this warranty, inaccessible is defined as areas of the building that could not be tested (sampled) without destruction of the structure or a portion of the structure. Inaccessible materials that are visible to MTGL inspectors shall be assumed to be lead-based paint coated.

It is the owner's legal obligation to disclose the inspection results to tenants and/or purchasers before obligation under 24 CFR part 35 and 40 CFR part 745 (published in the Federal Register, Volume 61, Number 45, March 6, 1996, starting on P. 9064; copies of the regulations and related materials can be obtained from the National Lead Information Center Clearinghouse, (1-800-424-LEAD)

GENERAL REFERENCES

LEAD-BASED PAINT

Lead-based paint testing was conducted in accordance with the Title 17, California Code of Regulations, Division 1, Chapter 8, Accreditation, Certification and Work Practices in Lead-Related Construction, Section 36000 and the United States Department of Housing and Urban Developments *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, Chapter 7 Lead-Based Paint Inspections*, as published in June 1995 and revised in 1997.

The State of California, HUD and the EPA currently define lead-based paint as paints or other surface coatings, which contain lead equal to or greater than 1.0 milligrams of lead per square centimeter of surface area (mg/cm²), or equal to or greater than 0.5% by weight.

Lead-based paint testing was conducted using portable x-ray fluorescence (XRF) spectrum analyzer, Model Niton XLP 300, Manufactured by Niton, Inc. The Niton XLP 300 is calibrated to measure the K-shell x-ray emissions of lead. The K-shell is normally used for paint analysis because it measures lead in all layers of paint films, including the lower layers where higher concentrations of lead are usually found. An initial calibration and ending calibration is validated each day with a laminated Lead Paint Standards testing card which is provided by the manufacturer. The card is a direct comparison to the paint standard to NIST kit SRM2579a with a spectrum analyzer. If an instrument does not maintain consistent calibrations after following the manufacturer's recommendation, the unit is removed from the site and sent back to the manufacturer for service.

In the instance where paint chip samples are collected, sample collections are conducted by the requirements of the American Society of Testing and Materials standard E 1729, Standard Practice for Field Collection of Dried Paint Samples for Lead Determination by Atomic Spectrometry Techniques and HUD Guidelines.

Performance Characteristic Sheet (PCS)

Performance Characteristic Sheets for most XRF models can be found on the U.S. Department of Housing and Urban Developments Office of Healthy Homes and Lead Hazard Control website, specifically HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.(http://www.hud.gov/offices/lead/lbp/hudguidelines/index.cfm).Operating specification and procedures for the XRF used for this survey can be downloaded at the website above. PCS's can also be obtained by calling toll free to the National Lead Information Clearinghouse, at 800-424-LEAD. Persons with hearing or speech impediments may access the above number via TTY by calling the Federal Information Relay Service at 800-887-8339, toll free.

GENERAL SUMMARY

Lead-Based Paint Inspection Results

The purpose of the lead-based paint survey was to evaluate the referenced facility's painted components that may contain lead-based paint. Suspect components identified during the survey included but not limited to the following:

- Interior: Door and Window Components, Wall, Floor and Ceilings
- Exterior: Wall, Windows, and Doors

The following is a summary of lead based painted components identified that contain lead greater than 1.0 mg/cm² or greater * (Please see attachment I for a detail report of findings.)

- No lead-based paint greater than 1.0 mg/cm2 was identified on the components tested.
- Intact lead containing (<1.0 mg/cm2) pink ceramic wall, base tile was identified in the bathrooms of Classrooms 19, 20.
- Intact lead containing (<1.0 mg/cm2) tan countertop and wall tile was identified in the kitchen area of Classrooms 19.
- Intact lead containing (<1.0 mg/cm2) porcelain sink was identified in the kitchen area of Classrooms 19.
- Deteriorated lead containing (<1.0 mg/cm2) painted entry door/frames and window frames were identified.

*MTGL, Inc. is not responsible for actual quantity of the material(s). MTGL recommends bidding contractors to calculate quantities for estimated abatement costs. When evaluating this report, it is assumed that according to Chapter 7 HUD guidelines, that if one testing combination (i.e. window, door) is positive for lead in an interior or exterior room equivalent, that all other similar testing combinations in those areas are assumed to be positive.

Deteriorated lead-based paint was not identified on the accessible components tested however, lead containing, ceramic wall base tile, countertop tile and a white porcelain sink was identified and Title 8, CCR Section 1532.1 will apply to minimize a lead dust hazard and work protection during demolition.

When evaluating this report, it is assumed that according to Chapter 7 HUD guidelines, that if one testing combination (i.e. window, door) is positive for lead in an interior or exterior room equivalent, that all other similar testing combinations in those areas are assumed to be positive.

Current EPA and Cal/EPA regulations do not require lead-based paint to be removed prior to demolition, unless found to be loose and peeling. Provided that paints are securely adhered to the substrates, deposal of the debris can be handled in California as non-hazardous and non-RCRA waste, pending characterization of the waste.

Loose and peeling paints or other wastes exceeding the Total Threshold Level Concentration (TTLC) of 1,000 ppm ($\mu g/g$) would be required to be disposed of as non-RCRA hazardous waste. However, if the leachable lead contents of the wasted exceed the Soluble Threshold Level Concentrations (STLC) of 5 mg/liter, the wastes must be disposed of as RCRA waste.

Several government agencies have definitions for what amount of lead constitutes paint to be considered "lead-based". The Department of Housing and Urban Development (HUD) has designated the amount to be 1.0 mg/cm², 0.5% by weight or 5000 ppm (parts per million). The HUD regulations are related to potential hazards in the home environment and not to construction activities. The amount designated for high contact play areas is 400 ppm.

Lead Safe Work Practice Requirements for Maintenance, Renovation or Remodeling

EPA's RRP Rule requires anyone (remodeling, renovation and painting contractors and most other trades) who works in pre-1978 housing for compensation and who might disturb painted surfaces to become an EPA Certified Renovator by taking an 8-hour RRP "Lead Safe Work Practices" class from an EPA accredited training provider. The initial certification is good for five (5) years. To "renew" contractors must take a 4-hour RRP Refresher class before their initial certification expires. The RRP rule applies to anyone who works for compensation in pre-1978 housing and/or child-occupied facilities who might disturb painted surfaces, including:

- General contractors
- Demolition workers
- Remodeling contractors
- Maintenance workers in multi-family housing
- Painters, plumbers and most specialty trades.

The RRP rule covers a lot of jobs: renovation, remodeling, painting, window replacement, plumbing, electrical work, heating & air-conditioning, demolition, plus work performed by trades like carpenters, electricians and handymen. The rule also applies to persons working for rental property owners, schools, and day care providers. And, it applies to non-profits and governmental agencies. The RRP Rule requires that "Lead Safe Work Practices" be used when disturbing more than 6 square feet per room or 20 square feet outside.

It shall be noted that California's lead-based paint regulations cover ALL pre-78 structures that have not been tested - not just Target Housing and Child-Occupied Facilities. (Title 17, CCR, Div 1, Ch 8). Since 2003, California law (Title 17) has required that "Lead Safe Work Practices" be used in ALL pre-1978 structures when disturbing any amount of known or "presumed" lead-based paint. Contractors may have taken additional training to meet State of California requirements for Lead-Related Construction and obtain the required California Department of Public Health-Lead Related Construction Certifications for permanent abatement. This

certification supplements but does not replace the EPA RRP certification. CDPH State Certified Lead Abatement Supervisors and Workers must also become RRP certified, and abatement firms must also be RRP Certified if they do non-abatement jobs.

Contractors and renovators who work or compensation in pre-1978 housing and/or a child-occupied facility that will disturb painted surfaces greater than 6 square feet per room or 20 square feet outside must give Clients a pamphlet called "Renovate Right" and get a signed receipt before beginning a job. Contractors can call (800) 424-5323 and ask for free copies of "Renovate Right" and the "Small Entity Compliance Guide to Renovate Right" or both can be downloaded as PDF files from the EPA website.

The Consumer Product Safety Commission (CPSC) has defined lead-based paint as surface coatings containing lead concentrations greater than 90 ppm. All children's products, and some furniture, for adult and children, must not contain a concentration of lead greater than 0.009 percent (90 parts per million) in paint or any similar surface coatings. Household paint must also meet this requirement. In 1978, the CPSC banned the sale of lead-based paint to consumers and the use of lead-based paint in residences and public buildings.

Please note that the detection of any amount of lead in a component will trigger numerous requirements from the California Occupations Safety and Health Administration (Cal-OSHA) lead in construction standard (e.g., Title 8, CCR Section 1532.1), even with common tasks such as drywall demolition, manual paint scraping, and manual paint sanding. The employer is required to conduct air sampling to determine the exposure to lead during these tasks and during other tasks that could result in lead exposure. Until actual exposures are determined, workers are required to wear respirators that are appropriate to the task. Detailed requirements are published in the Cal-OSHA standard for lead in construction.

All workers who may be exposed to lead must be trained in the hazards of lead. The results of air sampling are used to determine if workers are exposed to lead above the action level (AL) of 30 micrograms per cubic meter of air or above the permissible exposure limit (PEL) of 50 micrograms of lead per cubic meter of air, averaged over an 8-hour shift. Exposures above the AL or PEL will trigger additional requirements including engineering controls, proper housekeeping, washing facilities for hand and face washing, additional worker training, respiratory protection, medical monitoring, and additional air sampling. The employer must have a written compliance plan.

Lead Paint

Interim controls which are temporary measures may include the following:

- Paint Film Stabilization: "scrape off the loose and flakey paint and reapply with regular house paint".
- Friction (places that rub) and Impact (places that are bumped or banged) Surface Treatments (Doors, windows, cabinets, floors, etc): treated by covering the surfaces with an abrasion-resistant material, or by repairing to an intact working condition in order to minimize dust.
- Special Cleaning: reduction of lead hazard by cleaning up visible dust by HEPA vacuuming, washing and HEPA vacuuming again.

Interim controls typically last less than 20 years and will require the reevaluation of components on a periodic basis.

As of April 22, 2010, the EPA passed the Renovator, Repair and Paint Rule (RRP) (40 CFR Part 745.90) which states all renovation and painting contractors and other trades who work in pre-1978 housing and who might disturb painted surfaces must become Lead Certified Renovators by taking a one-day course about using "Lead Safe Work Practices" on the job.

Abatement methods which eliminate or put a barrier in front of lead hazards may include the following:

- Encapsulation: covering lead paint with a special liquid or thick coating (not regular paint). Works well on surfaces that are in good condition and should not be used on friction or impact surfaces.
- Enclosure: covering lead paint with a solid, dust-tight barrier that is usually mechanically attached (sheetrock, paneling, drywall).
- Replacement: removal of lead covered components (doors, windows, molding) and replacing with lead free components.
- Removal: recommended when other options may not be feasible; removal of lead paint by means of heat guns, scraping and sanding, power tools, chemical stripping and/or use of abrasives and hydro blasting.

Abatement controls typically last more than 20 years. Abatement methods that will result in the smallest amount of dust generated are preferred. Workers who partake in the above abatement methods should be California State Certified Lead Supervisors and Workers. Clearance sampling after abatement must be conducted by a certified lead-based paint inspector

Lead Safe Work Practice Requirements for Maintenance, Renovation or Remodeling

Lead-based paint, deteriorated paint or lead-based hazards require lead safe work practices. These practices are necessary for regular lead based paint hazard controls, repair, remodeling, renovation or other work activities that may disturb lead based paint above HUD's de minimis levels. HUD describes de minimus levels as follows:

- 20 square feet on exterior surfaces
- 2 square feet in any one interior room or space
- 10% of a type of building component with a small surface area (such as painted windowsills) on interior or exterior surfaces

Workers who may disturb lead-based paint above the de minimis level during repair, renovation or maintenance activities or any other work efforts that disturbs a known or assumed lead-based paint above HUD's de minimis shall be trained in lead safe work practices.

Firms providing abatement services must be certified as an abatement firm by the EPA or the State. Workers conducting abatement must be trained and certified as abatement workers by a training provider accredited by the EPA or State.

SECTION 6 DISCLOSURE

A copy of this summary must be provided to new lessees (tenants) and purchasers of this property under Federal Law (24 CFR part 35 and 40 CFR part 745) before they become obligated under a lease or sales contract. The complete report must also be provided to new purchasers and it must be made available to new tenants. Landlords (lessors) and sellers are also required to distribute an educational pamphlet and include standard warning language in their leases or sales contracts to ensure that parents have the information they need to protect their children from lead-based paint hazards.

It is the owner's legal obligation to disclose the inspection results to tenants and/or purchasers before obligation under 24 CFR part 35 and 40 CFR part 745 (published in the Federal Register, Volume 61, Number 45, March 6, 1996, starting on P. 9064; copies of the regulations and related materials can be obtained from the National Lead Information Center Clearinghouse, (1-800-424-LEAD).

SECTION 7 Appendices

Appendix 1

XRF Data Sheet

and

Performance Characteristic Sheet (PCS)

Lead Based Paint XRF Data Sheet

Project: Vanir- Juvenile Hall-Building 5, 331 The City Drive, Orange, CA 92868

Inspection Date: March 27, 2024

(EPA Regulated Lead-Based Paint= 1.0 mg/cm²)

(County of Los Angeles= 0.7mg/cm²) (<LOD= Below Limit of Detection)

			,		Comp	onent					
Sample #	Unit	Side	Location	Test Location	Structure	Member	Paint Condition	Substrate	Color	XRF Reading (mg/cm2)	Classification (pos, neg, inc.)
1	Bldg. 5		Calibration						Red NIST	1.0	
2	Bldg. 5		Calibration						Red NIST	1.0	
3	Bldg. 5		Calibration						Red NIST	0.9	
4	Bldg. 5	A	Room 20	Door	Door		Poor	Metal	Green	.4	Negative
5	Bldg. 5	A	Room 20	Door	Frame		Poor	Metal	Green	.6	Negative
6	Bldg. 5	A	Room 20	Wall			Intact	Concrete	White	.08	Negative
7	Bldg. 5	В	Room 20	Wall			Intact	Concrete	White	.13	Negative
8	Bldg. 5	C	Room 20	Wall			Intact	Concrete	White	.06	Negative
9	Bldg. 5	D	Room 20	Wall			Intact	Concrete	White	.13	Negative
10	Bldg. 5	A	Room 20	Window	Frame		Fair	Metal	White	.06	Negative
11	Bldg. 5	A	Room 20	Floor			Intact	Concrete	Green	<lod< td=""><td>Negative</td></lod<>	Negative
12	Bldg. 5	В	Rm 20 bath	Door	Door		Fair	Metal	White	.30	Negative
13	Bldg. 5	В	Rm 20 bath	Door	Frame		Fair	Metal	White	.30	Negative
14	Bldg. 5	C	Rm 20 bath	Window	Frame		Intact	Metal	White	.07	Negative
15	Bldg. 5	C	Rm 20 bath	Wall	Base	Tile	Intact	Ceramic	Peach	9.5	Positive
16	Bldg. 5	C	Rm 20 bath	Floor	Tile		Intact	Ceramic	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
17	Bldg. 5	A	Rm 20 bath	Wall			Intact	Plaster	White	.01	Negative
18	Bldg. 5	В	Rm 20 bath	Wall			Intact	Plaster	White	.03	Negative
19	Bldg. 5	C	Rm 20 bath	Wall			Intact	Plaster	White	<lod< td=""><td>Negative</td></lod<>	Negative
20	Bldg. 5	D	Rm 20 bath	Wall			Intact	Plaster	White	.02	Negative
21	Bldg. 5	D	Rm 20 bath	Ceiling			Intact	Plaster	White	.02	Negative
22	Bldg. 5	В	Room 20	Wall	Cabinet	Door	Intact	Wood	Blue	<lod< td=""><td>Negative</td></lod<>	Negative
23	Bldg. 5	В	Room 20	Wall	Cabinet	Casing	Intact	Wood	Blue	<lod< td=""><td>Negative</td></lod<>	Negative

Lead Based Paint XRF Data Sheet

Project: Vanir- Juvenile Hall-Building 5, 331 The City Drive, Orange, CA 92868

Inspection Date: March 27, 2024

(EPA Regulated Lead-Based Paint= 1.0 mg/cm²)

(County of Los Angeles= 0.7mg/cm²) (<LOD= Below Limit of Detection)

					Comp	onent					
Sample #	Unit	Side	Location	Test Location	Structure	Member	Paint Condition	Substrate	Color	XRF Reading (mg/cm2)	Classification (pos, neg, inc.)
24	Bldg. 5	В	Room 20	Counter	Door		Intact	Wood	Blue	<lod< td=""><td>Negative</td></lod<>	Negative
25	Bldg. 5	В	Room 20		Door	Casing	Intact	Wood	Blue	<lod< td=""><td>Negative</td></lod<>	Negative
26	Bldg. 5	D	Rm 19 bath	Door	Door		Fair	Metal	White	.29	Negative
27	Bldg. 5	D	Rm 19 bath	Door	Frame		Fair	Metal	Green	.11	Negative
28	Bldg. 5	C	Rm 19 bath	Window	Frame		Intact	Metal	Green	.06	Negative
29	Bldg. 5	С	Rm 19 bath	Wall	Base	Tile	Intact	Ceramic	Pink	7.1	Positive
30	Bldg. 5	A	Room 19	Door	Door		Fair	Metal	White	.31	Negative
31	Bldg. 5	A	Room 19	Door	Frame		Fair	Metal	White	.35	Negative
32	Bldg. 5	A	Room 19	Wall			Intact	Concrete	White	.06	Negative
33	Bldg. 5	В	Room 19	Wall			Intact	Concrete	White	.11	Negative
34	Bldg. 5	С	Room 19	Wall			Intact	Concrete	White	.10	Negative
35	Bldg. 5	D	Room 19	Wall			Intact	Concrete	White	.04	Negative
36	Bldg. 5	D	Room 19	Floor			Intact	Concrete	Green	<lod< td=""><td>Negative</td></lod<>	Negative
37	Bldg. 5	D	Room 19	Counter	Tile		Intact	Ceramic	Tan	8.4	Positive
38	Bldg. 5	D	Room 19	Wall	Tile		Intact	Ceramic	Tan	5.5	Positive
39	Bldg. 5	D	Room 19	Wall	Sink		Intact	Porcelain	White	5.6	Positive
40	Bldg. 5	A	Exterior	Wall	Fire box		Intact	Metal	Red	.05	Negative
41	Bldg. 5	A	Exterior	Wall			Intact	Brick	Red	<lod< td=""><td>Negative</td></lod<>	Negative
42	Bldg. 5	A	Exterior	Wall	Overhang		Intact	Concrete	White	<lod< td=""><td>Negative</td></lod<>	Negative
43	Bldg. 5	Α	Exterior	Window 1	Frame		Intact	Metal	Brown	.20	Negative
44	Bldg. 5	В	Exterior	Wall			Intact	Brick	Red	<lod< td=""><td>Negative</td></lod<>	Negative
45	Bldg. 5	A	Exterior	Wall	Facia		Fair	Metal	Gray	<lod< td=""><td>Negative</td></lod<>	Negative
46	Bldg. 5	D	Exterior	Wall	Ladder		Intact	Metal	Green	<lod< td=""><td>Negative</td></lod<>	Negative

Lead Based Paint XRF Data Sheet

Project: Vanir- Juvenile Hall-Building 5, 331 The City Drive, Orange, CA 92868

Inspection Date: March 27, 2024

(EPA Regulated Lead-Based Paint= 1.0 mg/cm²)

(County of Los Angeles= 0.7mg/cm²) (<LOD= Below Limit of Detection)

					Comp	onent					
Sample #	Unit	Side	Location	Test Location	Structure	Member	Paint Condition	Substrate	Color	XRF Reading (mg/cm2)	Classification (pos, neg, inc.)
47	Bldg. 5	С	Exterior	Wall			Intact	Brick	Red	<lod< td=""><td>Negative</td></lod<>	Negative
48	Bldg. 5	С	Exterior	Window 1	Frame		Intact	Metal	Brown	.17	Negative
49	Bldg. 5	В	Room 19	Wall	Partition		Intact	Wood	White	<lod< td=""><td>Negative</td></lod<>	Negative
50	Bldg. 5	D	Exterior	Roof	Air Han	Frame	Intact	Metal	Grey	<lod< td=""><td>Negative</td></lod<>	Negative
51	Bldg. 5		Calibration						Red NIST	1.0	Bldg. 5
	·										

Performance Characteristic Sheet

EFFECTIVE DATE: September 24, 2004 EDITION NO.: 1

MANUFACTURER AND MODEL:

Make: Niton LLC
Tested Model: XLp 300
Source: 109Cd

Note: This PCS is also applicable to the equivalent model variations indicated

below, for the Lead-in-Paint K+L variable reading time mode, in the XLi and

XLp series:

XLi 300A, XLi 301A, XLi 302A and XLi 303A. XLp 300A, XLp 301A, XLp 302A and XLp 303A. XLi 700A, XLi 701A, XLi 702A and XLi 703A. XLp 700A, XLp 701A, XLp 702A, and XLp 703A.

Note: The XLi and XLp versions refer to the shape of the handle part of the instrument. The differences in the model numbers reflect other modes available, in addition to Lead-in-Paint modes. The manufacturer states that specifications for these instruments are identical for the source, detector, and detector electronics relative to the Lead-in-Paint mode.

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

Lead-in-Paint K+L variable reading time mode.

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm² (inclusive)

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm² in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm² film).

If readings are outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instruments into control before XRF testing proceeds.

SUBSTRATE CORRECTION:

For XRF results using Lead-in-Paint K+L variable reading time mode, substrate correction is <u>not</u> needed for: Brick, Concrete, Drywall, Metal, Plaster, and Wood

INCONCLUSIVE RANGE OR THRESHOLD:

K+L MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm²)
Results not corrected for substrate bias on any	Brick	1.0
substrate	Concrete	1.0
	Drywall	1.0
	Metal	1.0
	Plaster	1.0
	Wood	1.0

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* ("HUD Guidelines"). Performance parameters shown on this sheet are calculated from the EPA/HUD evaluation using archived building components. Testing was conducted in August 2004 on 133 testing combinations. The instruments that were used to perform the testing had new sources; one instrument's was installed in November 2003 with 40 mCi initial strength, and the other's was installed June 2004 with 40 mCi initial strength.

OPERATING PARAMETERS:

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

SUBSTRATE CORRECTION VALUE COMPUTATION:

Substrate correction is not needed for brick, concrete, drywall, metal, plaster or wood when using Lead-in-Paint K+L variable reading time mode, the normal operating mode for these instruments. If substrate correction is desired, refer to Chapter 7 of the HUD Guidelines for guidance on correcting XRF results for substrate bias.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing. Use the K+L variable time mode readings.

Conduct XRF retesting at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below.

Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family housing a result is defined as the average of three readings. In multifamily housing, a result is a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF results.

Compute the average of all ten re-test XRF results.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

TESTING TIMES:

For the Lead-in-Paint K+L variable reading time mode, the instrument continues to read until it is moved away from the testing surface, terminated by the user, or the instrument software indicates the reading is complete. The following table provides testing time information for this testing mode. The times have been adjusted for source decay, normalized to the initial source strengths as noted above. Source strength and type of substrate will affect actual testing times. At the time of testing, the instruments had source strengths of 26.6 and 36.6 mCi.

	Tes	ting Times Usi	ng K+L Readin	g Mode (Seco	nds)		
		All Data		Median for laboratory-measured lead levels (mg/cm²)			
Substrate	25 th Percentile	Median	75 th Percentile	Pb < 0.25	0.25 <u><</u> Pb<1.0	1.0 <u><</u> Pb	
Wood Drywall	4	11	19	11	15	11	
Metal	4	12	18	9	12	14	
Brick Concrete Plaster	8	16	22	15	18	16	

CLASSIFICATION RESULTS:

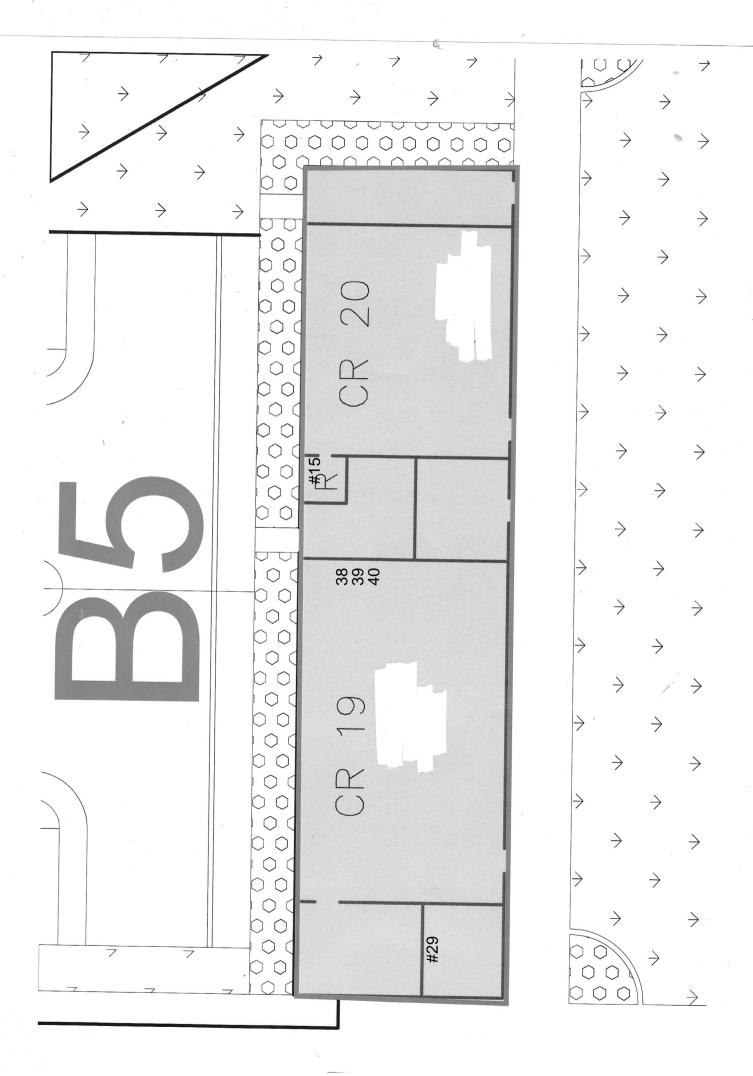
XRF results are classified as positive if they are greater than or equal to the threshold, and negative if they are less than the threshold.

DOCUMENTATION:

A document titled *Methodology for XRF Performance Characteristic Sheets* provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. For a copy of this document call the National Lead Information Center Clearinghouse at 1-800-424-LEAD.

This XRF Performance Characteristic Sheet was developed by the Midwest Research Institute (MRI) and QuanTech, Inc., under a contract between MRI and the XRF manufacturer. HUD has determined that the information provided here is acceptable when used as guidance in conjunction with Chapter 7, Lead-Based Paint Inspection, of HUD's *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*.

APPENDIX 2 SITE DRAWING



Appendix 3

Glossary





Glossary

AALA: American Association for Laboratory Accreditation. Also known as A2LA.

Abatement: A measure or set of measures designed to permanently eliminate lead-based paint hazards or lead-based paint. Abatement strategies include the removal of lead-based paint, enclosure, encapsulation, replacement of building components coated with lead-based paint, removal of lead-contaminated dust, and removal of lead-contaminated soil or overlaying of soil with a durable covering such as asphalt (grass and sod are considered interim control measures). All of these strategies require preparation; cleanup; waste disposal; postabatement clearance testing; recordkeeping; and, if applicable, monitoring. See also Complete abatement and Interim controls.

Abrasion resistance: Resistance of the paint to wear by rubbing or friction; related to both toughness and gloss.

Accessible surface: Any protruding interior or exterior surface, such as an interior window sill, that a young child can mouth or chew.

Accreditation: A formal recognition that an organization, such as a laboratory, is competent to carry out specific tasks or types of tests.

Accredited laboratory: A laboratory that has been evaluated and approved by the National Lead Laboratory Accreditation Program (NLLAP), to perform lead measurement or analysis, usually over a specified period of time.

Accredited training provider: A training provider who meets the standards established by EPA for the training of risk assessors, inspectors, lead-based paint hazard control contractors, and workers.

Accuracy: The degree of agreement between an observed value and an accepted reference value (a "true" value); a data quality indicator. Accuracy includes a combination of random errors (precision) and systematic errors (bias) due to sampling and analysis.

Acrylic: A synthetic resin used in highperformance waterborne coatings; a coating whose binder contains acrylic resins.

Adhesion: The ability of dry paint or other coating to attach to a surface and remain fixed on it without blistering, flaking, cracking, or being susceptible to removal by tape.

Administrative removal: The temporary removal of workers from the job to prevent the concentration of lead in their blood from reaching levels requiring medical removal.

AIHA: American Industrial Hygiene Association.

ALC: See Apparent Lead Concentration.

Aliquot: See Subsample.

Alkali: A chemical, such as Iye, soda, lime, etc., that will neutralize an acid. Oil paint films can be destroyed by alkalies. Some paint removal products contain alkaline substances.

Alkyd: Synthetic resin modified with oil; coating that contains alkyd resins in the binder.

Apparent Lead Concentration (ALC): The x-ray fluorescence (XRF) reading or average of more than one reading on a painted surface. See also XRF analyzer, Substrate Equivalent Lead (SEL), and Corrected Lead Concentration (CLC).

Bare soil: Soil not covered with grass, sod, some other similar vegetation, or paving, including the sand in sandboxes.





Bias: A systematic error in the measurement process. For XRF readings, one source of bias is the substrate effect. See also Substrate effect and XRF analyzer.

Biennial report (for hazardous waste): A report (EPA Form 8700–13A) submitted by generators of hazardous waste to the EPA Regional Administrator. The report is due on March 1 of even-numbered years. The report includes information on the generator's activities during the previous calendar year. The owners and operators of treatment, storage, and disposal facilities must also prepare and submit biennial reports using EPA Form 8700–1313.

Binder: Solid ingredients in a coating that hold the pigment particles in suspension and bind them to the substrate. Binders used in paints and coatings include oil, alkyd, acrylic, latex, and epoxy. The nature and amount of binder determines many of the coating's performance properties—washability, toughness, adhesion, gloss, etc. See also Pigment.

Biological monitoring: The analysis of blood, urine, or both to determine the level of lead contamination in the body. Blood lead levels are expressed in micrograms of lead per deciliter (one-tenth of a liter) of blood, or $\mu g/dL$. They are also expressed in micromoles per liter ($\mu mol/L$).

Blank: A nonexposed sample of the medium being used for testing (i.e., wipe or filter) that is analyzed to determine if the medium has been contaminated with lead (e.g., at the factory or during transport).

Blind sample: A subsample submitted for analysis with a composition and identity known to the submitter but not to the analyst; used to test the analyst's or laboratory's proficiency in conducting measurements. See also Spiked sample.

Blood lead threshold: Any blood lead level greater than or equal to 10 $\mu g/dL$ as defined by the Centers for Disease Control and Prevention. See also Elevated Blood Lead level (EBL) child.

Building component: Any element of a building that may be painted or have dust on its surface, e.g. walls, stair treads, floors, railings, doors, window sills, etc.

Building component replacement: See Replacement.

Cementitious material: A material that is mixed with water, either with or without aggregate, to provide the plasticity, cohesion, and adhesion necessary for the placement and formation of a rigid mass (ASTM Standard C 11).

Centimeter: See cm.

Certification: The process of testing and evaluating against certain specifications the competence of a person, organization, or other entity in performing a function or service, usually for a specified period of time.

Certified: The designation for contractors who have completed training and other requirements to allow them to safely undertake risk assessments, inspections, or abatement work. Risk assessors, inspectors, and abatement contractors should be certified by the appropriate local, State or Federal agency.

Certified Industrial Hygienist (CIH): A person who has passed the 2-day certification exam of the American Board of Industrial Hygiene, and who has at least 4 years of experience in industrial hygiene and a graduate degree or a total of 5 years of experience. See also Industrial hygienist.

Certified reference material (CRM): Reference material that has at least one of its property values established by a technically valid procedure and is accompanied by or traceable to a certificate or other documentation issued by a certifying body. See also Standard reference material.

CFR: See Code of Federal Regulations.

Chalking: The photo-oxidation of paint binders—usually due to weathering—that causes a powder to form on the film surface.





Characteristics (of hazardous waste): EPA has identified four characteristics of hazardous waste: ignitability, corrosivity, reactivity, and toxicity (as determined by the TCLP test). Any solid waste that exhibits at least one of these characteristics may be classified as hazardous under the Resource Conservation and Recovery Act (RCRA), depending on how the waste is produced and what quantities are generated. See also Toxicity Characteristic Leaching Procedure (TCLP).

Chewable surface: See Chewed surface and Accessible surface.

Chewed surface: Any painted surface that shows evidence of having been chewed or mouthed by a young child. A chewed surface is usually a protruding, horizontal part of a building, such as an interior window sill. See also Accessible surface.

CLC: See Corrected Lead Concentration (CLC).

Cleaning: The process of using a HEPA vacuum and wet cleaning agents to remove leaded dust; the process includes the removal of bulk debris from the work area. OSHA prohibits the use of compressed air to clean lead-contaminated dust from a surface.

Clearance examination: Visual examination and collection of environmental samples by an inspector or risk assessor and analysis by an accredited laboratory upon completion of an abatement project, interim control intervention, or maintenance job that disturbs lead-based paint (or paint suspected of being lead-based). The clearance examination is performed to ensure that lead exposure levels do not exceed standards established by the EPA Administrator pursuant to Title IV of the Toxic Substances Control Act, and that any cleaning following such work adequately meets those standards.

Clearance examiner: A person who conducts clearance examinations following lead-based paint hazard control and cleanup work, usually a certified risk assessor or a certified inspector.

cm: Centimeter; 1/100 of a meter.

Code of Federal Regulations (CFR): The codification of the regulations of Federal agencies. The regulations are published in the Federal Register. See also Federal Register (FR).

Cohesion: Ability of a substance to adhere to itself; internal adhesion; the force holding a substance together.

Common area: A room or area that is accessible to all residents in a community (e.g., hallways or lobbies); in general, any area not kept locked.

Competent person: As defined in the OSHA Lead Construction Standard (29 CFR 1926.62), a person who is capable of identifying or predicting hazardous working conditions and work areas, and who has authorization to take prompt, corrective measures to eliminate the hazards. A competent person is not necessarily a risk assessor, inspector, or abatement project supervisor.

Complete abatement: Abatement of all lead-based paint inside and outside a dwelling or building and reduction of any lead-contaminated dust or soil hazards. All of these strategies require preparation; cleanup; waste disposal; postabatement clearance testing; recordkeeping; and, if applicable, reevaluation and on-going monitoring. See also Abatement.

Compliance plan: A document that describes the types of tasks, workers, protective measures, and tools and other materials that may be employed in lead-based paint hazard control to comply with the OSHA Lead Exposure in Construction standard.

Composite sample: A single sample made up of individual subsamples. Analysis of a composite sample produces the arithmetic mean of all subsamples.

Containment: A process to protect workers and the environment by controlling exposures to the lead-contaminated dust and debris created during abatement. See Worksite preparation level.





Contingency plan: A document that describes an organized, planned, and coordinated course of action to be taken during any event that threatens human health or the environment, such as a fire, explosion, or the release of hazardous waste or its constituents from a treatment, storage, or disposal facility.

Corrected Lead Concentration (CLC): The absolute difference between the Apparent Lead Concentration and the Substrate Equivalent Lead. See also Apparent Lead Concentration (ALC) and Substrate Equivalent Lead (SEL).

Detection limit: The minimum amount of a substance that can be reliably measured by a particular method.

Deteriorated lead-based paint: Any lead-based paint coating on a damaged or deteriorated surface or fixture, or any interior or exterior lead-based paint that is peeling, chipping, blistering, flaking, worn, chalking, alligatoring, cracking, or otherwise becoming separated from the substrate.

Digestion blank: A mixture of the reagents used for digesting of paint, soil, or dust matrixes but without the matrix. The blank undergoes all the steps of the analysis, starting with digestion. The blank is used to evaluate the contamination process from a laboratory.

Direct-reading XRF: An analyzer that provides the operator with a display of lead concentrations calculated from the lead K x ray intensity without a graphic of the spectrum usually in mg/cm² (milligrams of lead per square centimeter of painted surface area). See also XRF analyzer.

Disposal (of hazardous waste): The discharge, deposit, injection, dumping, spilling, leaking, or placement of solid or hazardous waste on land or in water so that none of its constituents can pollute the environment by being emitted into the air or discharged into a body of water, including groundwater.

Disposal facility: A facility or part of one in which hazardous waste is placed on land or in water to remain there after the facility closes.

Door mat: See Walk-off mat.

Dust removal: A form of interim control that involves initial cleaning followed by periodic monitoring and recleaning, as needed. Depending on the severity of lead-based paint hazards, dust removal may be the primary activity or just one element of a broader control effort.

Dust trap: A surface, component, or furnishing that serves as a reservoir where dust can accumulate.

EBL child: See Elevated Blood Lead level (EBL) child.

Efflorescence: The salt rising to the surface of a material, such as masonry, plaster, or cement, caused by the movement of water through the material. Paint or encapsulants may not adhere to a surface contaminated with efflorescence.

Elastomeric: A group of pliable, elastic liquid encapsulant coatings. An elastomer is a macromolecular material which, at room temperature, is capable of substantially recovering its size and shape after the force causing its deformation is removed (see ASTM D 907, D-14).

Elevated Blood Lead level (EBL) child: A child who has a blood lead level greater than or equal to 20 μg/dL or a persistent 15 μg/dL. See also Blood lead threshold.

Encapsulation: Any covering or coating that acts as a barrier between lead-based paint and the environment, the durability of which relies on adhesion and the integrity of the existing bonds between multiple layers of paint and between the paint and the substrate. See also Enclosure.

Enclosure: The use of rigid, durable construction materials that are mechanically fastened to the substrate to act as a barrier between the lead-based paint and the environment.





Engineering controls: Measures other than respiratory protection or administrative controls that are implemented at the work site to contain, control, and/or otherwise reduce exposure to lead-contaminated dust and debris usually in the occupational health setting. The measures include process and product substitution, isolation, and ventilation.

Epoxy paint: Paint based on an epoxy resin. An epoxy resin is a cross-linking resin the reactivity of which depends on the epoxide group.

Evaluation: Risk assessment, paint inspection, reevaluation, investigation, clearance examination, or risk assessment screen.

Examination: See Clearance examination.

Examiner: A person certified to conduct clearance examinations or reevaluations, usually a certified inspector or certified risk assessor.

Exposure monitoring: The sampling and analysis of air both inside and outside the work area to determine the degree of worker and resident exposure to lead or other airborne contaminants, often involving air sampling inside a worker's breathing zone.

Exterior work area: For lead hazard control work, the exterior work area includes any exterior building components, such as a porch or stairway; the safety perimeter; and access barriers.

Facility (pertaining to hazardous waste): All buildings, contiguous land, structures, and other appurtenances, as well as any improvements, where lead-based paint or hazardous waste is treated, stored, or disposed. A facility may consist of several different treatment, storage, or disposal units, such as landfills and surface impoundments.

Federal Register (FR): A daily Federal publication that contains proposed and final regulations, rules, and notices.

Fibermat: A semirigid woven material attached with a liquid adhesive to a surface or substrate.

Field blank: A clean sample of the matrix (e.g., filter, or wipe) that has been exposed to the sampling conditions; returned to the laboratory; and analyzed as an environmental sample. Clean quartz sand, air sampling filters and cassettes, and clean wipes can be used as field blanks. The field blank, which should be treated just like the sample, indicates possible sources of contamination.

FR: See Federal Register (FR).

Friction surface: Any interior or exterior surface, such as a window or stair tread, subject to abrasion or friction.

Generator: Any person whose act or operation produces hazardous waste identified or listed in 40 CFR Part 261 or whose act causes a hazardous waste to come under regulation (40 CFR 260.10).

Generator identification number: The unique number assigned by EPA to each generator; transporter of hazardous waste; and treatment, storage, or disposal facility.

Hazardous waste: As defined in EPA regulations (40 CFR 261.3), hazardous waste is solid waste or a combination of solid wastes that because of its quantity; concentration; or physical, chemical, or infectious characteristics may cause or significantly contribute to increases in mortality, serious and irreversible or incapacitating but reversible illnesses, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed. As defined in the regulations, solid waste is hazardous if it meets one of four conditions: (1) exhibits a characteristic of hazardous waste (40 CFR Sections 261.20 through 262.24); (2) has been listed as hazardous (40 CFR Section 261.31 through 261.33); (3) is a mixture containing a listed hazardous waste combined with a nonhazardous solid waste, unless the mixture is specifically excluded or no longer exhibits any of the characteristics of hazardous waste; and (4) is not excluded from regulation as hazardous waste. For lead-based paint abatement





waste, hazardous waste is waste that contains more than 5 ppm of leachable lead as determined by the TCLP test, or is waste that is corrosive, ignitable, or reactive and not otherwise excluded.

Hazardous Waste Manifest: See Manifest.

Heat gun: A device capable of heating leadbased paint causing it to separate from the substrate. For lead hazard control work, the heat stream leaving the gun should not exceed 1,100 °F (some authorities may use a different temperature).

HEPA filter: See High-Efficiency Particulate Air (HEPA) filter.

HEPA/wet wash/HEPA cycle: The cleaning cycle that begins with HEPA vacuuming, followed by a wet wash with a lead-specific cleaning agent, such as trisodium phosphate detergent or another liquid cleaning agent, followed by a final pass with a HEPA vacuum over the surface.

High-Efficiency Particulate Air (HEPA) filter: A filter capable of removing particles of 0.3 microns or larger from air at 99.97 percent or greater efficiency.

High phosphate detergent: See Trisodium phosphate (TSP) detergent.

Impact surface: An interior or exterior surface (such as surfaces on doors) subject to damage by repeated impact or contact.

Incinerator: An enclosed device using controlled flame combustion that neither meets the criteria for classification as a boiler nor is listed as an industrial furnace.

Industrial hygienist: A person having a college or university degree in engineering, chemistry, physics, medicine, or a related physical or biological science who, by virtue of special training, is qualified to anticipate, recognize, evaluate, and control environmental and occupational health hazards and the impact of those hazards on the community and workers.

In-place management: See Interim controls.

Inspection (of paint): A surface-by-surface investigation to determine the presence of lead-based paint (in some cases including dust and soil sampling) and a report of the results.

Inspector: An individual who has completed training from an accredited program and been licensed or certified by the appropriate State or local agency to (1) perform inspections to determine and report the presence of lead-based paint on a surface-by-surface basis through onsite testing, (2) report the findings of such an inspection, (3) collect environmental samples for laboratory analysis, (4) perform clearance testing, and (5) document successful compliance with lead-based paint hazard control requirements or standards.

Interim controls: A set of measures designed to temporarily reduce human exposure or possible exposure to lead-based paint hazards. Such measures include specialized cleaning, repairs, maintenance, painting, temporary containment, and management and resident education programs. Monitoring, conducted by owners, and reevaluations, conducted by professionals, are integral elements of interim control. Interim controls include dust removal; paint film stabilization; treatment of friction and impact surfaces; installation of soil coverings, such as grass or sod; and land-use controls. See also Monitoring, Reevaluation, and Abatement.

Interior window sill: The portion of the horizontal window ledge that protrudes into the interior of the room, adjacent to the window sash when the window is closed; often called the window stool.

Investigation (pertaining to EBL case): The process of determining the source of lead exposure for a child or other resident with an elevated blood lead level. Investigation consists of administration of a questionnaire, comprehensive environmental sampling, case management, and other measures.





Investigator: A person who conducts an investigation of a dwelling where a resident has an elevated blood lead level. The investigator must be proficient in interviewing techniques, environmental sampling, and the interpretation of risk assessment and environmental sampling data.

Laboratory analysis: A determination of the lead content by atomic absorption spectroscopy, inductively coupled plasma emission spectroscopy, or laboratory-based K or L x-ray fluorescence, or an equivalent method.

Landfill: A State-licensed or State-permitted disposal facility that meets municipal solid waste standards (see Federal regulations at 40 CFR 258).

Landfill liner: A continuous layer of natural or synthetic materials placed beneath and sometimes around a surface impoundment, landfill, or landfill cell. The layer restricts the downward or lateral escape of hazardous waste, hazardous waste constituents, or leachate (40 CFR Part 258).

Latex: A waterborne emulsion paint made with synthetic binders, such as 100-percent acrylic, vinyl acrylic, terpolymer, or styrene acrylic; a stable emulsion of polymers and pigment in water.

Lead: Lead includes metallic lead and inorganic and organic compounds of lead.

Lead-based paint: Any paint, varnish, shellac, or other coating that contains lead equal to or greater than 1.0 mg/cm² as measured by XRF or laboratory analysis, or 0.5 percent by weight $(5,000~\mu\text{g/g},\,5,000~\text{ppm},\,\text{or}\,5,000~\text{mg/kg})$ as measured by laboratory analysis. (Local definitions may vary.)

Lead-based paint hazard: A condition in which exposure to lead from lead-contaminated dust, lead-contaminated soil, or deteriorated lead-based paint would have an adverse effect on human health (as established by the EPA Administrator under Title IV of the Toxic Substances Control Act). Lead-based paint hazards

include for example, deteriorated lead-based paint, leaded dust levels above applicable standards, and bare leaded soil above applicable standards.

Lead-based paint hazard control: Activities to control and eliminate lead-based paint hazards, including interim controls, abatement, and complete abatement.

Lead-based paint abatement planner/designer: An individual who has completed an accredited training program on planning and designing lead-based paint abatement projects.

Lead-based paint abatement worker: See Worker.

Lead carbonate: A pigment used in some leadbased paints as a hiding agent; also known as white lead.

Lead-contaminated dust: Surface dust in residences that contains an area or mass concentration of lead in excess of the standard established by the EPA Administrator, pursuant to Title IV of the Toxic Substances Control Act. Until the EPA standards are set, the HUD-recommended clearance and risk assessment standards for leaded dust are 100 $\mu g/ft^2$ on floors, 500 $\mu g/ft^2$ on interior window sills, and 800 $\mu g/ft^2$ on window troughs. The recommended standard for lead hazard screens for floors is 50 $\mu g/ft^2$ and for window troughs is 400 $\mu g/ft^2$.

Lead-contaminated soil: Bare soil on residential property that contains lead in excess of the standard established by the EPA Administrator, pursuant to Title IV of the Toxic Substances Control Act. The HUD-recommended standard and interim EPA guidance is 400 $\mu g/g$ for high-contact play areas and 2,000 $\mu g/g$ in other bare areas of the yard. Soil contaminated with lead at levels greater than or equal to 5,000 $\mu g/g$ should be abated by removal or paving.

Lead-free dwelling: A lead-free dwelling contains no lead-based paint and has interior dust and exterior soil lead levels below the applicable HUD and EPA standards.





Lead hazard screen: A means of determining whether residences in good condition should have a full risk assessment. Also called a risk assessment screen.

Lead-poisoned child: A child with a single blood lead level that is greater than or equal to 20 μ g/dL or consecutive blood lead levels greater than or equal to 15 μ g/dL. Local definitions may vary.

Lead-specific detergent: A cleaning agent manufactured specifically for cleaning and removing leaded dust or other lead contamination.

Leaded dust: See Lead-contaminated dust.

Leaded zinc: A paint primer made from zinc oxide and lead sulfates.

Licensed: Holding a valid license or certification issued by EPA or by an EPA-approved State program pursuant to Title IV of the Toxic Substances Control Act. The license is based on certification for lead-based paint hazard control work. See also Certified.

Listed waste: A hazardous waste that has been placed on one of three lists developed by EPA: nonspecific source wastes, specific source wastes, and commercial chemical products. The lists were developed by examining different types of waste and chemical products to determine if they exhibited one of the four characteristics of hazardous waste (toxicity, corrosivity, ignitability, or reactivity), met the statutory definition of hazardous waste, were acutely toxic or acutely hazardous, or were otherwise toxic.

Maintenance: Work intended to maintain adequate living conditions in a dwelling, which has the potential to disturb lead-based paint or paint that is suspected of being lead-based.

Manifest: The shipping document (EPA Form 8700–22 or a comparable form required by the State or locality) used for identifying the quantity, composition, origin, routing, and destination of hazardous waste during its transport

from the point of generation to the point of treatment, storage, or disposal. Also, a shipping document used to keep track of items being transported. All hazardous waste must be accompanied by a manifest. See Hazardous waste.

Mat: See Walk-off mat.

Matrix blank: A sample of the matrix (paint chips, soil, or dust) that does not contain the analyte lead. This sample goes through the complete analysis, including digestion.

MDL: See Method detection limit (MDL).

Mean: The arithmetic average of a series of numerical data values; for example, the algebraic sum of the data values divided by the number of data values.

Medical removal: The temporary removal of workers from the job because of the occurrence of elevated blood lead levels as defined in the OSHA Lead Exposure in Construction standard (29 CFR 1926.62).

Method blank: See Digestion blank.

Method detection limit (MDL): The minimum concentration of an analyte that, for a given matrix and method, has a 99-percent probability of being identified, qualitatively or quantitatively measured, and reported to be greater than zero.

mg: Milligram; 1/1,000 of a gram.

Microgram: See µg.

Mil: 1/1,000 of an inch; used to measure thickness.

Milligram: See mg.

Monitoring: Surveillance to determine (1) that known or suspected lead-based paint is not deteriorating, (2) that lead-based paint hazard controls, such as paint stabilization, enclosure, or encapsulation have not failed, (3) that structural problems do not threaten the integrity of hazard controls or of known or suspected





lead-based paint, and (4) that dust lead levels have not risen above applicable standards. There are two types of monitoring activities; visual surveys by property owners and reevaluations by certified risk assessors. Visual surveys are generally conducted annually for the purpose of making the first three determinations listed above. Reevaluations are conducted in accordance with the Standard Reevaluation Schedule (or more frequently, if needed) for the purpose of making all four determinations. Monitoring is not required in properties known to be free of lead-based paint. See also Reevaluation and Standard reevaluation schedule.

Monofil: A State-approved landfill that accepts only construction debris.

Mouthable surface: See Chewed surface.

Multifamily housing: Housing that contains more than one dwelling unit per location.

NLLAP requirements: Requirements, specified by the EPA National Lead Laboratory Accreditation Program (NLLAP), for accreditation for the lead analysis of paint, soil, and dust matrixes by an EPA-recognized laboratory accreditation organization.

Offsite paint removal: The process of removing a component from a building and stripping the paint from the component at an offsite paint-stripping facility.

Ongoing monitoring: See Monitoring.

Owner: A person, firm, corporation, guardian, conservator, receiver, trustee, executor, government agency or entity, or other judicial officer who, alone or with others, owns, holds, or controls the freehold or leasehold title or part of the title to property, with or without actually possessing it. This definition includes a vendee who possesses the title, but does not include a mortgagee or an owner of a reversionary interest under a ground rent lease.

Oxidation: A chemical reaction that occurs upon exposure to oxygen. Some coatings cure by oxidation; oxygen enters the liquid coating and crosslinks (attaches) the resin molecules. This film-forming method is also called "air cure" or "air dry." Oxidation also causes rust to form on metals and paint to chalk.

Paint film stabilization: The process of wet scraping, priming, and repainting surfaces coated with deteriorated lead-based paint; paint film stabilization includes cleanup and clearance.

Paint removal: An abatement strategy that entails the removal of lead-based paint from surfaces. For lead hazard control work, this can mean using chemicals, heat guns below 1,100 °F, and certain *contained* abrasive methods. Open flame burning, open abrasive blasting, sandblasting, water blasting, and extensive dry scraping are prohibited paint removal methods. (Methylene chloride paint removers and dry scraping are also not recommended.)

Patch test: A test method or procedure to assess the adhesion of an encapsulant coating to a substrate covered with a layer or layers of lead-based paint.

Personal breathing zone samples: Air samples collected from the breathing zone of a worker (within a 1-foot radius of the worker's mouth) but outside the respirator. The samples are collected with a personal sampling pump operating at 2 liters per minute, drawing air through a 37 mm mixed cellulose ester filter housed in a closed-face cassette with a pore size of 0.8 microns. See Exposure monitoring.

Personal Protective Equipment (PPE): Equipment for protecting the eyes, face, head, and/or extremities; includes protective clothing, respiratory devices, and protective shields; used when hazards capable of causing bodily injury or impairment are encountered.





PHA: See Public Housing Agency (PHA).

Pigment: Insoluble, finely ground materials that give paint its properties of color and hide.

Pigment Volume Concentration (PVC): Pigment volume as a percentage of the total non-volatile ingredients.

Pilot project: In multifamily housing, the testing of a lead-based paint hazard control strategy on a limited number of dwellings, usually those that are vacant, to determine the feasibility of carrying out such a strategy in the entire multifamily housing development; usually involves paint testing, air sampling, wipe sampling, worksite preparation, and a variety of lead-based paint hazard control treatments.

Plastic: See Polyethylene plastic.

Polyethylene plastic: All references to polyethylene plastic refer to 6-mil plastic sheeting or polyethylene bags (or doubled bags if using 4-mil polyethylene bags), or any other thick plastic material shown to demonstrate at least equivalent performance. Plastic used to contain waste should be capable of completely containing the waste and, after being properly sealed, should remain leak-tight with no visible signs of discharge during movement or relocation.

Polyurethane: An exceptionally hard and wear-resistant coating created by the reaction of polyols with a multifunctional isocyanate; often used to seal wood floors following lead-based paint hazard control work and cleaning.

Precision: The degree to which a set of observations or measurements of the same property, usually obtained under similar conditions, conform to themselves; a data quality indicator. Precision is usually expressed in either absolute or relative terms as standard deviation, variance, or range. Often known as "reproducibility."

Primary prevention: The process of controlling lead hazards to prevent exposure *before* a child is poisoned. See Secondary prevention and Tertiary prevention.

Primary standard: A substance or device with a property or value that is unquestionably accepted, within specified limits, in establishing the value of the same or related property of another substance or device.

Public Housing Agency (PHA): Any State, county, municipality, or other government entity or public body, or agency or instrumentality thereof, authorized to engage or assist in the development or operation of housing for low-income families.

PVC: See Pigment Volume Concentration (PVC).

Quality Assurance (QA): An integrated system of activities involving planning, quality control, quality assessment, reporting, and quality improvement to ensure that a product or service meets defined standards of quality within a stated level of confidence.

Quality Control (QC): The overall system of technical activities whose purpose is to measure and control the quality of a product or service so that it meets the needs of users. The aim is to provide a level of quality that is satisfactory, adequate, dependable, and economical.

Random sample: A sample drawn from a population in a way that allows each member of the population to have an equal chance of being selected. Random sampling is a process used to identify locations for the lead-based paint inspections in multifamily dwellings. See also Targeted sample and Worst-case sample.

RCRA: See Resource Conservation and Recovery Act (RCRA).

Reevaluation: In lead hazard control work, the combination of a visual assessment and collection of environmental samples performed by a certified risk assessor to determine if a previously implemented lead-based paint hazard control measure is still effective and if the dwelling remains lead-safe.





Reference material: A material or substance that has at least one sufficiently well established property that can be used to calibrate an apparatus, assess a measurement method, or assign values to materials.

Reinspection: See Reevaluation.

Removal: See Paint removal.

Renovation: Work that involves construction and/or home or building improvement measures such as window replacement, weatherization, remodeling, and repainting.

Replacement: A strategy of abatement that entails the removal of building components coated with lead-based paint (such as windows, doors, and trim) and the installation of new components free of lead-based paint.

Representative sample: A sample of a universe or whole (e.g., waste sample pile, lagoon, groundwater, or waste stream) that can be expected to exhibit the average properties of the entire universe or whole.

Resident: A person who lives in a dwelling.

Resource Conservation and Recovery Act (RCRA): The primary Federal statute governing waste management from generation to disposal. RCRA defines the criteria for hazardous and nonhazardous waste.

Risk assessment: An onsite investigation of a residential dwelling to discover any lead-based paint hazards. Risk assessments include an investigation of the age, history, management, and maintenance of the dwelling, and the number of children under age 6 and women of childbearing age who are residents; a visual assessment; limited environmental sampling (i.e., collection of dust wipe samples, soil samples, and deteriorated paint samples); and preparation of a report identifying acceptable abatement and interim control strategies based on specific conditions.

Risk assessment screen: A type of risk assessment performed only in buildings in good condition using fewer samples but more stringent evaluation criteria (standards) to determine lead hazards.

Risk assessor: A certified individual who has completed training with an accredited training program and who has been certified to (1) perform risk assessments, (2) identify acceptable abatement and interim control strategies for reducing identified lead-based paint hazards, (3) perform clearance testing and reevaluations, and (4) document the successful completion of lead-based paint hazard control activities.

Sample site: A specific spot on a surface being tested for lead concentration.

Saponification: The chemical reaction between alkalies and oil that produces a type of soap. Because of saponification, oil and alkyd coatings will not adhere to masonry substrates, galvanized metals, or zinc-rich primers. Also a form of incompatibility between types of coatings.

Screen: See Risk assessment screen or Lead hazard screen.

Screening: The process of testing children to determine if they have elevated blood lead levels.

Secondary prevention: The process of identifying children who have elevated blood lead levels through screening and controlling or eliminating the sources of further exposure. See also Primary prevention and Tertiary prevention.

SEL: See Substrate Equivalent Lead (SEL).

Site: The land or body of water where a facility is located or an activity is conducted. The site includes adjacent land used in connection with the facility or activity.





Small-quantity generator: Owners, contractors (generators), or both who produce less than 100 kg of hazardous waste per month and accumulate less than 100 kg of hazardous waste at any one time, or who produce less than 1 kg of acutely hazardous waste per month and accumulate less than 1 kg of acutely hazardous waste at any one time.

Soil: See Bare soil.

Solid waste: As defined by RCRA, the term solid waste means garbage; refuse; sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility; or other discarded materials, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations or from community activities. The term does not include solid or dissolved material in domestic sewage or solid or dissolved material in irrigation return flows or industrial discharges (which are point sources subject to permits under the Clean Water Act), nor does the term include special nuclear or byproduct material as defined by the Atomic Energy Act of 1954.

Spectrum analyzer: A type of XRF analyzer that provides the operator with a plot of the energy and intensity, or counts of both K and L x-ray spectra, as well as a calculated lead concentration. See also XRF analyzer.

Spiked matrix: See Spiked sample.

Spiked sample: A sample prepared by adding a known mass of the target analyte (e.g., leaded dust) to a specific amount of matrix sample (e.g., one dust wipe) for which an independent estimate of the target analyte concentration is available. Spiked samples are used to determine, for example, the effect of the matrix on a method's recovery efficiency. See also Blind sample.

Spot-prime: To apply a paint primer to localized areas of exposed substrate.

Standard deviation: A measure of the precision of a reading; the spread of the deviation from the mean. The smaller the standard deviation, the more precise the analysis. The standard deviation is calculated by first obtaining the mean, or the arithmetic average, of all of the readings. A formula is then used to calculate how much the individual values vary from the mean—the standard deviation is the square root of the arithmetic average of the squares of the deviation from the mean. Many hand calculators have an automatic standard deviation function. See also Mean.

Standard reevaluation schedule (SRS): A schedule that determines the frequency that reevaluations should be performed on a property.

Standard reference material (SRM): A certified reference material produced by the National Institute of Standards and Technology (U.S. Department of Commerce) and characterized for absolute content independent of analytical method. See also Certified reference material.

Subsample: A representative portion of a sample. A subsample may be either a field sample or a laboratory sample. A subsample is often combined with other subsamples to produce a composite sample. See also Composite sample.

Substrate: A surface on which paint, varnish, or other coating has been applied or may be applied. Examples of substrates include wood, plaster, metal, and drywall.

Substrate effect: The radiation returned to an XRF analyzer by the paint, substrate, or underlying material, in addition to the radiation returned by any lead present. This radiation, when counted as lead x-rays by an XRF analyzer contributes to substrate equivalent lead (bias). The inspector may have to compensate for this effect when using XRF analyzers. See also XRF analyzer.





Substrate Equivalent Lead (SEL): The XRF measurement taken on an unpainted surface; used to calculate the corrected lead concentration on a surface by using the following formula: Apparent Lead Concentration—Substrate Equivalent Lead = Corrected Lead Concentration. See also Apparent Lead Concentration (ALC), Corrected Lead Concentration (CLC), and XRF analyzer.

Target housing: Any residential unit constructed before 1978, except dwellings that do not contain bedrooms or dwellings that were developed specifically for the elderly or persons with disabilities—unless a child younger than 6 resides or is expected to reside in the dwelling. In the case of jurisdictions that banned the sale or use of lead-based paint before 1978, the Secretary of HUD may designate an earlier date for defining target housing.

Targeted sample: A sample of dwelling units selected from an apartment building or housing development using information supplied by the owner. The units selected are likely to have the greatest probability of containing lead-based paint hazards. A targeted sample is usually selected for performing risk assessments in multifamily housing when it is not possible to select a worst-case sample. See also Worst-case sample and Random sample.

TCLP: See Toxicity Characteristic Leaching Procedure (TCLP).

Tertiary prevention: Providing medical treatment to children with elevated blood lead levels to prevent more serious injury or death.

Testing combination: A unique surface to be tested that is characterized by the room equivalent, component, substrate, and visible color.

Test location: A specific area on a testing combination where XRF instruments will test for lead-based paint.

Toxicity Characteristic Leaching Procedure (TCLP): A laboratory test to determine if excessive levels of lead or other hazardous materials could leach from a sample into groundwater; usually used to determine if waste is hazardous based on its toxicity characteristics.

Trained: Successful completion of a training course in a particular discipline. For lead hazard control work, the training course must be accredited by EPA or by an EPA-approved State program, pursuant to Title IV of the Toxic Substances Control Act.

Transporter: A person who transports hazardous waste, requiring a manifest under 40 CFR Part 260.10, within the United States by air, rail, highway, or water.

Treatment: In residential lead-based paint hazard control work, any method designed to control lead-based paint hazards. Treatment includes interim controls, abatement, and removal. Hazardous waste "treatment" is a method, technique, or process (such as neutralization) that is designed to change the physical, chemical, or biological character or composition of hazardous waste to neutralize it; render it nonhazardous or less hazardous; recover it; make it safer to transport, store, or dispose; or allow for easier recovery, storage, or volume reduction.

Treatment, Storage, and Disposal (TSD) facility: A facility licensed to handle hazardous waste.

Trisodium phosphate (TSP) detergent: A detergent that contains trisodium phosphate.

Trough: See Window trough.

Truck-mounted vacuum unit: A vacuum system whose components, except for hoses and attachments, are located outside the building undergoing dust removal. The exhaust is vented outside so that the interior dust is not disturbed.

TSD: See Treatment, Storage, and Disposal (TSD) facility.

TSP: See Trisodium phosphate (TSP) detergent.

 μ g (or ug): Micrograms. The prefix micromeans 1/1,000,000 (or one-millionth); a microgram is 1/1,000,000 of a gram and 1/1,000 of a milligram; equal to about 35/1,000,000,000 (35 billionths) of an ounce (an ounce is equal to 28,400,000 μ g).





Urethane-modified alkyd: An alkyd molecule that has been chemically modified by the incorporation of a urethane; a coating, often a varnish, that uses a urethane-modified alkyd resin in the binder.

Useful life: The life expectancy of a coating before it requires refinishing or some other form of maintenance.

VOC: See Volatile Organic Compound (VOC).

Volatile Organic Compound (VOC): Substances that vaporize or evaporate from a coating during the coating or curing process.

Walk-off mat: A washable, fibrous material (preferably with a rubber or vinyl backing) positioned at main entryways to reduce transport of lead dust and lead soil into a building or residence.

White lead: A white pigment, usually lead carbonate. See also Lead carbonate.

Window sill: See Interior window sill.

Window stool: See Interior window sill.

Window trough: For a typical double-hung window, the portion of the exterior window sill between the interior window sill (or stool) and the frame of the storm window. If there is no storm window, the window trough is the area that receives both the upper and lower window sashes when they are both lowered. Sometimes inaccurately called the window "well." See also Window well.

Window well: The space that provides exterior access and/or light to a window that is below grade, i.e., below the level of the surrounding earth or pavement. See also Window trough.

Worker: An individual who has completed training in an accredited program to perform lead-based paint hazard control in housing.

Worksite: Any interior or exterior area where lead-based paint hazard control work takes place.

Worksite preparation level: A set of measures designed to protect residents and the environment from leaded dust, paint chips, or other forms of lead contamination through the erection of barriers and the establishment of access control, resident relocation or movement restrictions, warning signs, ventilation, and other measures.

Worst-case sample: A sample of dwelling units having the greatest probability of containing lead-based paint hazards selected by a risk assessor on the basis of a visual examination of all dwelling units in a housing development or apartment building. See also Targeted sample and Random sample.

XRF analyzer: An instrument that determines lead concentration in milligrams per square centimeter (mg/cm²) using the principle of x-ray fluorescence (XRF). Two types of XRF analyzers are used—direct readers and spectrum analyzers. In these *Guidelines*, the term XRF analyzer only refers to portable instruments manufactured to analyze paint, and does not refer to laboratory-grade units or portable instruments designed to analyze soil.

Appendix 4

Inspector Certification



STATE OF CALIFORNIA DEPARTMENT OF PUBLIC HEALTH



LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:

CERTIFICATE TYPE:

NUMBER:

EXPIRATION DATE:

Lead Inspector/Assessor

LRC-00000459

5/31/2025

Lead Project Monitor

LRC-00000458

5/31/2025

Michelle Ehresman

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD

Appendix 5

CDPH 8552 Inspection Form

LEAD HAZARD EVALUATION REPORT

Section 1 — Date of Lead Hazard Evaluation <u>3/27</u>	/24		
Section 2 — Type of Lead Hazard Evaluation (Chec	ck one box only)		
✓ Lead Inspection Risk assessment	Clearance Inspection	Other (specify)	
Section 3 — Structure Where Lead Hazard Evaluat	ion Was Conducted		
Address [number, street, apartment (if applicable)]	City	County	Zip Code
331 The City Drive (Building 5)	Orange	Orange	92868
Construction date (year) Type of structure of structure		Children living in	n structure?
Multi-unit building	School or daycar	e Yes	∨ No
Unknown Single family dwelling	g Other_	Don't K	now
Section 4 — Owner of Structure (if business/agenc	y, list contact person)	l	
Name		Telephone number	
c/o Vanir Contruction (Scott Battles)		916-677-7024	
Address [number, street, apartment (if applicable)]	City	State	Zip Code
4540 Duckhorn Drive, Suite 300	Sacramento	CA	95834
Section 5 — Results of Lead Hazard Evaluation (ch	and all that apply)		
Section 5 — Results of Lead Hazard Evaluation (Ci	eck all that apply)		
✓ No lead-based paint detected Intact lea	d-based paint detected	Deteriorated	l lead-based paint detected
No lead hazards detected Lead-contaminated	dust found Lead-cor	ntaminated soil found	✓ Other_Lead containing ceramic to
To load hazardo dotoctod	add found	Training Con Touring	lead containg door/frame
Section 6 — Individual Conducting Lead Hazard Ev	/aluation		lead containing porcelair
Name		Telephone number	
Michelle Ehresman		858-537-399	99
Address [number, street, apartment (if applicable)]	City	State	Zip Code
7742 Arjons Drive	San Diego	CA	92126
CDPH certification number	Signature		Date
LRC 0459	1	11	4/18/24
Name and CDPH certification number of any other individuals	conducting campling or toot		
Name and ODF in Certification number of any other individuals	s conducting sampling or test	ing (ii applicable)	
Section 7 — Attachments			
A. A foundation diagram or sketch of the structure indic	cating the specifc location	s of each lead hazard	or presence of
lead-based paint; B. Each testing method, device, and sampling procedu	ire lised.		
C. All data collected, including quality control data, labo		aboratory name, addr	ess, and phone number.
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	TI		
First copy and attachments retained by inspector	Third copy only (r	no attachments) mailed c	or faxed to:

Appendix 6

Renovate Right



AUTION CAUTION

CAUTION

CAUTION

CAUTION







1-800-424-LEAD (5323) www.epa.gov/getleadsafe EPA-740-K-10-001 April 2010



Important lead hazard information for families, child care providers and schools.





IT'S THE LAW!

Federal law requires contractors that disturb painted surfaces in homes, child care facilities and schools, built before 1978 to be certified and follow specific work practices to prevent lead contamination. Always ask to see your contractor's certification.

Federal law requires that individuals receive certain information before renovating more than six square feet of painted surfaces in a room for interior projects or more than twenty square feet of painted surfaces for exterior projects or window replacement or demolition in housing, child care facilities and schools built before 1978.

- Homeowners and tenants: renovators must give you this pamphlet before starting work.
- Child care facilities, including preschools and kindergarten classrooms, and the families of children under six years of age that attend those facilities: renovators must provide a copy of this pamphlet to child care facilities and general renovation information to families whose children attend those facilities.



WHO SHOULD READ THIS PAMPHLET?

This pamphlet is for you if you:

- Reside in a home built before 1978.
- Own or operate a child care facility, including preschools and kindergarten classrooms, built before 1978, or
- Have a child under six years of age who attends a child care facility built before 1978.

You will learn:

- Basic facts about lead and your health.
- How to choose a contractor, if you are a property owner.
- What tenants, and parents/guardians of a child in a child care facility or school should consider.
- How to prepare for the renovation or repair job.
- What to look for during the job and after the job is done.
- Where to get more information about lead.

This pamphlet is not for:

- Abatement projects. Abatement is a set of activities aimed specifically at
 eliminating lead or lead hazards. EPA has regulations for certification and training of
 abatement professionals. If your goal is to eliminate lead or lead hazards, contact the
 National Lead Information Center at 1-800-424-LEAD (5323) for more information.
- "Do-it-yourself" projects. If you plan to do renovation work yourself, this document is a good start, but you will need more information to complete the work safely. Call the National Lead Information Center at 1-800-424-LEAD (5323) and ask for more information on how to work safely

in a home with lead-based paint.

Contractor education. Contractors
 who want information about working
 safely with lead should contact
 the National Lead Information
 Center at 1-800-424-LEAD (5323)
 for information about courses and
 resources on lead-safe work practices.



RENOVATING, REPAIRING, OR PAINTING?



- Is your home, your building, or the child care facility or school your children attend being renovated, repaired, or painted?
- Was your home, your building, or the child care facility or school where your children under six years of age attend built before 1978?

If the answer to these questions is YES, there are a few important things you need to know about lead-based paint.

This pamphlet provides basic facts about lead and information about lead safety when work is being done in your home, your building or the child care facility or school your children attend.

The Facts About Lead

- Lead can affect children's brains and developing nervous systems, causing reduced IQ, learning disabilities, and behavioral problems. Lead is also harmful to adults.
- Lead in dust is the most common way people are exposed to lead. People can also get lead in their bodies from lead in soil or paint chips. Lead dust is often invisible.
- Lead-based paint was used in more than 38 million homes until it was banned for residential use in 1978.
- Projects that disturb painted surfaces can create dust and endanger you and your family. Don't let this happen to you. Follow the practices described in this pamphlet to protect you and your family.

LEAD AND YOUR HEALTH

Lead is especially dangerous to children under six years of age.

Lead can affect children's brains and developing nervous systems, causing:

- Reduced IQ and learning disabilities.
- · Behavior problems.

Even children who appear healthy can have dangerous levels of lead in their bodies.

Lead is also harmful to adults. In adults, low levels of lead can pose many dangers, including:

- High blood pressure and hypertension.
- Pregnant women exposed to lead can transfer lead to their fetuses. Lead gets into the body when it is swallowed or inhaled.
- People, especially children, can swallow lead dust as they eat, play, and do other normal hand-to-mouth activities.
- People may also breathe in lead dust or fumes if they disturb lead-based paint.
 People who sand, scrape, burn, brush or blast or otherwise disturb lead-based paint risk unsafe exposure to lead.

What should I do if I am concerned about my family's exposure to lead?

- Call your local health department for advice on reducing and eliminating exposures to lead inside and outside your home, child care facility or school.
- Always use lead-safe work practices when renovation or repair will disturb painted surfaces.
- A blood test is the only way to find out if you or a family member already has lead poisoning. Call your doctor or local health department to arrange for a blood test.

For more information about the health effects of exposure to lead, visit the EPA lead website at www.epa.gov/lead/pubs/leadinfo.htm or call 1-800-424-LEAD (5323).

There are other things you can do to protect your family every day.

- Regularly clean floors, window sills, and other surfaces.
- Wash children's hands, bottles, pacifiers, and toys often.
- Make sure children eat a healthy, nutritious diet consistent with the USDA's dietary guidelines, that helps protect children from the effects of lead.
- Wipe off shoes before entering house.



WHERE DOES THE LEAD COME FROM?

Dust is the main problem.

The most common way to get lead in the body is from dust. Lead dust comes from deteriorating lead-based paint and lead-contaminated soil that gets tracked into your home. This dust may accumulate to unsafe levels. Then, normal hand to-mouth activities, like playing and eating (especially in young children), move that dust from surfaces like floors and window sills into the body.

Home renovation creates dust.

Common renovation activities like sanding, cutting, and demolition can create hazardous lead dust and chips.

Proper work practices protect you from the dust.

The key to protecting yourself and your family during a renovation, repair or painting job is to use lead-safe work practices such as containing dust inside the work area, using dust-minimizing work methods, and conducting a careful cleanup, as described in this pamphlet.

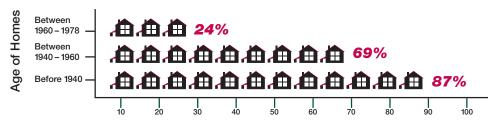
Other sources of lead.

Remember, lead can also come from outside soil, your water, or household items (such as lead-glazed pottery and lead crystal). Contact the National Lead Information Center at 1-800-424-LEAD (5323) for more information on these sources.



CHECKING YOUR HOME FOR LEAD-BASED PAINT

Percentage of Homes Likely to Contain Lead



Older homes, child care facilities, and schools are more likely to contain lead-based paint.

Homes may be single-family homes or apartments. They may be private, government-assisted, or public housing. Schools are preschools and kindergarten classrooms. They may be urban, suburban, or rural.

You have the following options:

You may decide to assume your home, child care facility, or school contains lead. Especially in older homes and buildings, you may simply want to assume lead-based paint is present and follow the lead-safe work practices described in this brochure during the renovation, repair, or painting job.

You can hire a certified professional to check for lead-based paint.

These professionals are certified risk assessors or inspectors, and can determine if your home has lead or lead hazards.

- A certified inspector or risk assessor can conduct an inspection telling you whether your home, or a portion of your home, has lead-based paint and where it is located. This will tell you the areas in your home where lead-safe work practices are needed.
- A certified risk assessor can conduct a risk assessment telling you if your home currently has any lead hazards from lead in paint, dust, or soil. The risk assessor can also tell you what actions to take to address any hazards.
- For help finding a certified risk assessor or inspector, call the National Lead Information Center at 1-800-424-LEAD (5323).

You may also have a certified renovator test the surfaces or components being disturbed for lead using a lead test kit. Test kits must be EPA-recognized and are available at hardware stores. They include detailed instructions for their use.

FOR PROPERTY OWNERS

You have the ultimate responsibility for the safety of your family, tenants, or children in your care.

This means properly preparing for the renovation and keeping persons out of the work area (see p. 8). It also means ensuring the contractor uses lead-safe work practices.

Federal law requires that contractors performing renovation, repair and painting projects that disturb painted surfaces in homes, child care facilities, and schools built before 1978 be certified and follow specific work practices to prevent lead contamination.

Make sure your contractor is certified, and can explain clearly the details of the job and how the contractor will minimize lead hazards during the work.

- You can verify that a contractor is certified by checking EPA's website at epa.gov/getleadsafe or by calling the National Lead Information Center at 1-800-424-LEAD (5323). You can also ask to see a copy of the contractor's firm certification.
- Ask if the contractor is trained to perform lead-safe work practices and to see a copy of their training certificate.
- Ask them what lead-safe methods they will use to set up and perform the job in your home, child care facility or school.
- Ask for references from at least three recent jobs involving homes built before 1978, and speak to each personally.

Always make sure the contract is clear about how the work will be set up, performed, and cleaned.

- Share the results of any previous lead tests with the contractor.
- You should specify in the contract that they follow the work practices described on pages 9 and 10 of this brochure.
- The contract should specify which parts of your home are part of the work area and specify which lead-safe work practices will be used in those areas. Remember, your contractor should confine dust and debris to the work area and should minimize spreading that dust to other areas of the home.
- The contract should also specify that the contractor will clean the work area, verify that it was cleaned adequately, and re-clean it if necessary.

If you think a worker is not doing what he is supposed to do or is doing something that is unsafe, you should:

- Direct the contractor to comply with regulatory and contract requirements.
- Call your local health or building department, or
- Call EPA's hotline 1-800-424-LEAD (5323).

If your property receives housing assistance from HUD (or a state or local agency that uses HUD funds), you must follow the requirements of HUD's Lead-Safe Housing Rule and the ones described in this pamphlet.

FOR TENANTS AND FAMILIES OF CHILDREN UNDER SIX YEARS OF AGE IN CHILD CARE FACILITIES AND SCHOOLS

You play an important role ensuring the ultimate safety of your family.

This means properly preparing for the renovation and staying out of the work area (see p. 8).

Federal law requires that contractors performing renovation, repair and painting projects that disturb painted surfaces in homes built before 1978 and in child care facilities and schools built before 1978, that a child under six years of age visits regularly, to be certified and follow specific work practices to prevent lead contamination.

The law requires anyone hired to renovate, repair, or do painting preparation work on a property built before

1978 to follow the steps described on pages 9 and 10 unless the area where the work will be done contains no lead-based paint.

If you think a worker is not doing what he is supposed to do or is doing something that is unsafe, you should:

- · Contact your landlord.
- · Call your local health or building department, or
- Call EPA's hotline 1-800-424-LEAD (5323).

If you are concerned about lead hazards left behind after the job is over, you can check the work yourself (see page 10).



7

PREPARING FOR A RENOVATION

The work areas should not be accessible to occupants while the work occurs.

The rooms or areas where work is being done may need to be blocked off or sealed with plastic sheeting to contain any dust that is generated. Therefore, the contained area may not be available to you until the work in that room or area is complete, cleaned thoroughly, and the containment has been removed. Because you may not have access to some areas during the renovation, you should plan accordingly.

You may need:

- Alternative bedroom, bathroom, and kitchen arrangements if work is occurring in those areas of your home.
- A safe place for pets because they too can be poisoned by lead and can track lead dust into other areas of the home.
- A separate pathway for the contractor from the work area to the outside in order to bring materials in and out of the home. Ideally, it should not be through the same entrance that your family uses.
- A place to store your furniture. All furniture and belongings may have to be moved from the work area while the work is being done. Items that can't be moved, such as cabinets, should be wrapped in plastic.
- To turn off forced-air heating and air conditioning systems while the work is being done. This prevents dust from spreading through vents from the work area to the rest of your home. Consider how this may affect your living arrangements.

You may even want to move out of your home temporarily while all or part of the work is being done.

Child care facilities and schools may want to consider alternative accommodations for children and access to necessary facilities.



DURING THE WORK

Federal law requires contractors that are hired to perform renovation, repair and painting projects in homes, child care facilities, and schools built before 1978 that disturb painted surfaces to be certified and follow specific work practices to prevent lead contamination.

The work practices the contractor must follow include these three simple procedures, described below:

- 1. Contain the work area. The area must be contained so that dust and debris do not escape from that area. Warning signs must be put up and plastic or other impermeable material and tape must be used as appropriate to:
 - Cover the floors and any furniture that cannot be moved.
 - Seal off doors and heating and cooling system vents.

These will help prevent dust or debris from getting outside the work area.

2. Avoid renovation methods that generate large amounts of lead-contaminated dust.

Some methods generate so much lead-contaminated dust that their use is prohibited.

They are:

- · Open flame burning or torching.
- Sanding, grinding, planing, needle gunning, or blasting with power tools and equipment not equipped with a shroud and HEPA vacuum attachment.
- Using a heat gun at temperatures greater than 1100°F.

There is no way to eliminate dust, but some renovation methods make less dust than others. Contractors may choose to use various methods to minimize dust generation, including using water to mist areas before sanding or scraping; scoring paint before separating components; and prying and pulling apart components instead of breaking them.

- **3. Clean up thoroughly.** The work area should be cleaned up daily to keep it as clean as possible. When all the work is done, the area must be cleaned up using special cleaning methods before taking down any plastic that isolates the work area from the rest of the home. The special cleaning methods should include:
 - Using a HEPA vacuum to clean up dust and debris on all surfaces, followed by
 - Wet wiping and wet mopping with plenty of rinse water.

When the final cleaning is done, look around. There should be no dust, paint chips, or debris in the work area. If you see any dust, paint chips, or debris, the area must be re-cleaned.

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FOR PROPERTY OWNERS: AFTER THE WORK IS DONE

When all the work is finished, you will want to know if your home, child care facility, or school has been cleaned up properly. Here are some ways to check.

Ask about your contractor's final cleanup check. Remember, lead dust is often invisible to the naked eye. It may still be present even if you cannot see it. The contractor must use disposable cleaning cloths to wipe the floor of the work area and compare them to a cleaning verification card to determine if the work area was adequately cleaned.

To order a cleaning verification card and detailed instructions visit the EPA lead website at www.epa.gov/lead or contact the National Lead Information Center at 1-800-424-LEAD (5323) or visit their website at www.epa.gov/lead/nlic.htm.

You also may choose to have a lead-dust test. Lead-dust tests are wipe samples sent to a laboratory for analysis.

- You should specify in your contract that a lead-dust test will be done. In this case, make it clear who will do the testing.
- Testing should be done by a lead professional.

If you choose to do the testing, some EPA-recognized lead laboratories will send you a kit that allows you to collect samples and send them back to the lab for analysis.

Contact the National Lead Information Center at 1-800-424-LEAD (5323) for lists of qualified professionals and EPA-recognized lead labs.

If your home, child care facility, or school fails the dust test, the area should be re-cleaned and tested again.

Where the project is done by contract, it is a good idea to specify in the contract that the contractor is responsible for re-cleaning if the home, child care facility, or school fails the test.



FOR ADDITIONAL INFORMATION

You may need additional information on how to protect yourself and your children while a job is going on in your home, your building, or child care facility.

The National Lead Information Center at 1-800-424-LEAD (5323) or www.epa.gov/lead/nlic.htm can tell you how to contact your state, local, and/or tribal programs or get general information about lead poisoning prevention.

- State and tribal lead poisoning prevention or environmental protection programs can provide information about lead regulations and potential sources of financial aid for reducing
- lead hazards. If your state or local government has requirements more stringent than those described in this pamphlet, you must follow those requirements.
- Local building code officials can tell you the regulations that apply to the renovation work that you are planning.
- State, county, and local health departments can provide information about local programs, including assistance for lead-poisoned children and advice on ways to get your home checked for lead.

The National Lead Information Center can also provide a variety of resource materials, including the following guides to lead-safe work practices. Many of these materials are also available at www.epa.gov/lead/pubs/brochure.htm.

- Steps to Lead Safe Renovation, Repair and Painting.
- Protect Your Family from Lead in Your Home
- Lead in Your Home: A Parent's Reference Guide





For the hearing impaired, call the Federal Information Relay Service at 1-800-877-8339 to access any of the phone numbers in this brochure.

10 11

OTHER FEDERAL AGENCIES

EPA Regional Offices

EPA addresses residential lead hazards through several different regulations. EPA requires training and certification for conducting abatement and renovations, education about hazards associated with renovations, disclosure about known lead paint and lead hazards in housing, and sets lead-paint hazard standards.

Your Regional EPA Office can provide further information regarding lead safety and lead protection programs at **epa.gov/lead**.

Region 1

(Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island, Vermont) Regional Lead Contact U.S. EPA Region 1 Suite 1100 One Congress Street Boston, MA 02114-2023 (888) 372-7341

Region 2

(New Jersey, New York, Puerto Rico, Virgin Islands) Regional Lead Contact U.S. EPA Region 2 2890 Woodbridge Avenue Building 205, Mail Stop 225 Edison, NJ 08837-3679 (732) 321-6671

Region 3

(Delaware, Maryland, Pennsylvania, Virginia, Washington, DC, West Virginia) Regional Lead Contact U.S. EPA Region 3 1650 Arch Street Philadelphia, PA 19103-2029 (215) 814-5000

Region 4

(Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee) Regional Lead Contact U.S. EPA Region 4 61 Forsyth Street, SW Atlanta, GA 30303-8960 (404) 562-9900

Region 5

(Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin) Regional Lead Contact U.S. EPA Region 5 77 West Jackson Boulevard Chicago, IL 60604-3507 (312) 886-6003

Region 6

(Arkansas, Louisiana, New Mexico, Oklahoma, Texas) Regional Lead Contact U.S. EPA Region 6 1445 Ross Avenue, 12th Floor Dallas, TX 75202-2733 (214) 665-6444

Region 7

(Iowa, Kansas, Missouri, Nebraska) Regional Lead Contact U.S. EPA Region 7 901 N. 5th Street Kansas City, KS 66101 (913) 551-7003

Region 8

(Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming) Regional Lead Contact U.S. EPA Region 8 1595 Wynkoop Street Denver, CO 80202 (303) 312-6312

Region 9

(Arizona, California, Hawaii, Nevada) Regional Lead Contact U.S. Region 9 75 Hawthorne Street San Francisco, CA 94105 (415) 947-8021

Region 10

(Alaska, Idaho, Oregon, Washington) Regional Lead Contact U.S. EPA Region 10 1200 Sixth Avenue Seattle, WA 98101-1128 (206) 553-1200

CPSC

The Consumer Product Safety
Commission (CPSC) protects the public
from the unreasonable risk of injury or
death from 15,000 types of consumer
products under the agency's jurisdiction.
CPSC warns the public and private
sectors to reduce exposure to lead and
increase consumer awareness. Contact
CPSC for further information regarding
regulations and consumer product safety.

CPSC

4330 East West Highway Bethesda, MD 20814 Hotline 1-(800) 638-2772 www.cpsc.gov

CDC Childhood Lead Poisoning Prevention Branch

The Centers for Disease Control and Prevention (CDC) assists state and local childhood lead poisoning prevention programs to provide a scientific basis for policy decisions, and to ensure that health issues are addressed in decisions about housing and the environment. Contact CDC Childhood Lead Poisoning Prevention Program for additional materials and links on the topic of lead.

CDC Childhood Lead Poisoning Prevention Branch

4770 Buford Highway, MS F-40 Atlanta, GA 30341 (770) 488-3300 www.cdc.gov/nceh/lead

HUD Office of Healthy Homes and Lead Hazard Control

The Department of Housing and Urban Development (HUD) provides funds to state and local governments to develop cost-effective ways to reduce lead-based paint hazards in America's privately-owned low-income housing. In addition, the office enforces the rule on disclosure of known lead paint and lead hazards in housing, and HUD's lead safety regulations in HUD-assisted housing, provides public outreach and technical assistance, and conducts technical studies to help protect children and their families from health and safety hazards in the home. Contact the HUD Office of Healthy Homes and Lead Hazard Control for information on lead regulations, outreach efforts, and lead hazard control research and outreach grant programs.

U.S. Department of Housing and Urban Development

Office of Healthy Homes and Lead Hazard Control 451 Seventh Street, SW, Room 8236 Washington, DC 20410-3000 HUD's Lead Regulations Hotline (202) 402-7698 www.hud.gov/offices/lead/

12 13



SAMPLE PRE-RENOVATION FORM

This sample form may be used by renovation firms to document compliance with the Federal pre-renovation education and renovation, repair, and painting regulations.

Occupant Confirmation Pamphlet Receipt

□ I have received a copy of the lead hazard info potential risk of the lead hazard exposure fro dwelling unit. I received this pamphlet befor	om renovation activity to be performed in my
Printed Name of Owner-occupant	
Signature of Owner-occupant	Signature Date
Renovator's Self Certification Option (for tend Instructions to Renovator: If the lead hazard int signature was not obtainable, you may check t	formation pamphlet was delivered but a tenant
pamphlet to the rental dwelling unit listed b	faith effort to deliver the lead hazard information elow at the date and time indicated and that the of receipt. I further certify that I have left a copy nt.
	welling unit listed below and that the occupant receipt. I further certify that I have left a copy of
Printed Name of Person Certifying Delivery	Attempted Delivery Date
Signature of Person Certifying Lead Pamphlet	Delivery
Unit Address	

Note Regarding Mailing Option — As an alternative to delivery in person, you may mail the lead hazard information pamphlet to the owner and/or tenant. Pamphlet must be mailed at least seven days before renovation. Mailing must be documented by a certificate of mailing from the post office.

FOR DEMOLITION COMPREHENSIVE ASBESTOS SURVEY REPORT

PROJECT NAME:

ORANGE COUNTY JUVENILE HALL- BUILDING 6



PROJECT ADDRESS:

331 The City Drive, S. Orange, California 92868

Prepared for:

Mr. Scott L. Battles Vanir Construction Management, Inc 4540 Duckhorn Drive, Suite 300 Sacramento, California 95834

Prepared by:

MTGL, Inc. 7742 Arjons Dr. San Diego, California 92126 858-537-3999

Project Number:

SDPE-24-061.1CT

Report By:

Michelle Ehresman, CAC

CAC Expiration Date: November: 14-5323 CAC Expiration Date: November 19, 20204

Date of Report:

April 18, 2024

Version 1.0

TABLE OF CONTENTS

INTRODUCTIONSection 1
General Information
Project Information
Site/Building Description
Suspect Materials Observed
INVESTIGATION LIMITATIONS & WARRANTYSection 2
ASBESTOS SURVEY METHODOLOGYSection 3
General References
Visual Inspection
Homogeneous Material Classifications
Sampling Procedures
Laboratory Procedures
Method of Analysis
Laboratory Quality Control Program
ASBESTOS SURVEY OBSERVATIONS AND FINDINGS Section 4
Summary
Table 1: Positively Identified Materials that Contain Asbestos (ACM and ACCM) and
Assessment of Material Condition.
Table 2: Materials found to be Negative for Asbestos
General Information
Environmental Protection Agency (EPA)
California Occupational Safety & Health Agency (Cal/OSHA)
National Emission Standards for Hazardous Air Pollutants (NESHAP)
CONCLUSIONS & RECOMMENDATIONS Section 5
APPENDICES Section 6
Appendix 1 – Asbestos Laboratory Results & Chain of Custodies
Appendix 2 – Site Map with Sample Location
Appendix 3 – Photo Documentation
Appendix 4 – Inspector Certifications

SECTION 1 INTRODUCTION

GENERAL INFORMATION

MTGL, Inc. was retained to conduct a survey for suspect asbestos containing materials. The intent of this survey is to pre-determine the presence of EPA/OSHA regulated Asbestos Containing Materials and Asbestos Containing Construction Materials (ACCM) that may need to be addressed prior to scheduled demolition and/or renovation activities.

MTGL's scope of work was limited to the following:

- Review of project drawings.
- Conduct a pre-construction asbestos inspection limited to Client specified locations in accordance with NESHAP Regulations and the collection of bulk samples of suspect ACM.
- Submit samples to a NVLAP accredited laboratory for analysis of asbestos fiber content using polarized-light microscopy.
- Prepare report with material description, sampling locations, analytical results, and recommendations for proper handling/abatement prior to demolition and/or renovation activities.

PROJECT INFORMATION

Survey Requested/Authorized By: Mr. Scott L. Battles

Type of Survey Requested: Limited (Restricted to Client Specified Locations Only)

Destructive Sampling Allowed by Client: Yes

Project Name: ORANGE COUNTY JUVENILE HALL BUILDING 6

Project Address: 331 The City of Orange Dr. S in the city of Orange in the State of California.

Date of Inspection: March 27, 2024 to April 2, 2024

AHERA Certified Building Inspector Name: Darla Beery

AHERA Certified Building Inspector Number: 2023ABCA171101

Additional AHERA Certified Building Inspector Name: Michelle Ehresman

Additional AHERA Certified Building Inspector Number: ABIR0727230010N35227

Local Air District: South Coast Air Quality Management District (Sampling method, lab

qualifications, lab analytical procedures, and lab method of analysis were performed in compliance with Rule 1403 (d)(1)(A) and 40 CFR Part 763 -

Asbestos. requirments)

Laboratory: EMLab P&K, LLC – ID#: 3592262/3600734

9445 Farnham St, Suite 103, San Diego, CA 92123

(866) 888-6653 Fax (623) 780-7695 www.emlab.com

Laboratory Sample Analysis Method: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA

METHOD 600/R-93-116, SOP EM-AS-S-1267)

Sampling Protocols: EPA 40CFR 763.86 Methods

SITE/BUILDING DESCRIPTION

Structure Type: Commercial Facility

Year Built: Unknown

Date of known additions: Unknown

Building Structural Damage (If Any): None Observed

Approximate Square Feet of Surveyed Area: 2,500

Structure Frame: Wood

If other, describe: None

Structure Foundation: Concrete Slab On Grade

If other, describe: None

Number of Floors: 1

Building Occupied: Yes

SUSPECT MATERIALS OBSERVED

Suspect Materials Observed During the Asbestos Survey Conducted

- 2'x4' Fissured Ceiling Tile
- Fiberglass Insulation
- Concrete Block
- 6"x6" Ceramic Tile
- Ceramic Tile Grout
- Concrete Ceiling
- Concrete Flooring
- HVAC Caulk
- Carpet Adhesive
- Cove Base Adhesive
- Exterior Concrete Walls
- Textured Concrete (Exterior Soffit)
- Rolled Roofing and Roof Mastic

Inaccessible Materials Presumed to be Asbestos Content:

None

SECTION 2 INVESTIGATION LIMITATIONS & WARRANTY

Per the agreement between The Client and MTGL, Inc., the scope of services was performed as described in this report.

The intent of this survey is to pre-determine the presence of EPA/OSHA regulated asbestos containing building materials that may need to be addressed prior to scheduled demolition and/or renovation activities.

INVESTIGATION LIMITATIONS

MTGL, Inc. did not conduct testing within interstitial wall cavities, ceiling plenums, HVAC ventilation systems or crawlspaces or other locations of the facility, outside of the Client specified areas.

The findings of this report are valid as of the date of the survey and sample collection. Changes in the condition of the property can occur with passage of time, whether they are due to natural processes or the works of man on this or adjacent properties. In addition, changes in the state-of-art technology and/or government codes may occur. Due to such changes, the findings of this report may be invalidated wholly or in part by conditions beyond our control. Due to changes that can occur over time, submittals of this report to Regulatory Agencies may require additional site visits and assessment to document current conditions.

The final assessment of the potential for the existence of hazardous contaminants at the site should be considered a professional opinion based on the data obtained during the investigation and should not be considered a definitive statement that a hazardous contaminant or conditions are, or is not, present in the area of study. These opinions have been derived in accordance with current standards of practice.

This report is intended solely for use by the parties to whom it is addressed. This report is not intended for and may not contain sufficient information for purposes other than qualitative evaluation of asbestos or conditions at the time of our evaluation. Reliance on this report for other purposes or by other parties shall be at the user's sole risk.

WARRANTY

MTGL, Inc. warrants that the findings contained herein have been prepared with the level of care and skill exercised by experienced and knowledgeable environmental consultants who are appropriately licensed or otherwise trained to perform asbestos inspections and assessments pursuant to the scope of work required on this project. MTGL's Asbestos Survey Reports are prepared by trained certified professionals without a conflict of interest in the demolition(s) or renovation project(s) as per the Business and Professions Code 7180 (BP7180).

MTGL, Inc. warrants that the findings contained herein have been prepared in general accordance with accepted professional practices as applied by similar professionals in the community at the time of its preparation. Changes in the state of the art or in applicable regulations cannot be anticipated and have not been addressed in this report.

The survey included inspection of visible and accessible materials. MTGL did not inspect or sample inaccessible areas and did not dismantle any part of the structure to survey inaccessible areas. For the purpose of this warranty, inaccessible is defined as areas that could not be tested (sampled) without destruction of the structure or a portion of the structure. Inaccessible materials that are visible to MTGL's inspectors shall be assumed to be asbestos containing. No other warranty is expressed, or implied.

SECTION 3 ASBESTOS SURVEY METHODOLOGY

GENERAL REFERENCES

The asbestos survey consisted of two major activities: visual inspection and sampling. Although these activities are listed separately, they are integrated tasks.

VISUAL INSPECTION

The visual inspection was performed by an AHERA Certified Building Inspector under the direction of a California Certified Asbestos Consultant. An initial building walkthrough was conducted to determine the presence of suspect materials that were accessible or exposed. Materials that were similar in general appearance were grouped into homogeneous sampling areas.

HOMOGENEOUS MATERIAL CLASSIFICATIONS

A preliminary walkthrough of the building was conducted to determine areas of materials that were visually similar in color, texture, and general appearance and that appeared to have been installed at the same time. Such materials are termed "homogeneous materials" by the EPA. During this walkthrough, the approximate locations of these homogeneous materials were noted. Only materials that were accessible or exposed and suspected to contain asbestos were identified.

Following the EPA protocols, each identified suspect homogeneous material is placed in one of the following EPA classifications:

- Surfacing Materials (spray or trowel applied materials)
- Thermal System Insulation (materials applied to various mechanical systems)
- Miscellaneous Materials (any material which do not fit either of the above categories, such as floor tiles, etc.)

SAMPLING PROCEDURES

Following the walkthrough, the inspector collected selected samples of exposed or accessible materials identified as suspect material. Sampling was limited to accessible materials not involving destruction of walls, other building elements, physical barriers, or the structural integrity of the item being tested.

EPA guidelines were used to determine the sampling protocol. Sampling locations that were chosen to be representative of the homogeneous sampling area. While an effort was made to collect samples randomly, samples were taken preferentially from damaged areas or areas which were the least visible to minimize disturbance of the material.

Samples of surfacing material were collected in general accordance with the EPA random sampling protocol outlined in the EPA publication, "Asbestos in Buildings: Simplified Sampling Scheme for Friable Surfacing Materials" (EPA 560/5-85-030a, October 1985).

Samples of miscellaneous materials were also taken as randomly as possible, while attempting to sample already damaged areas so as to minimize disturbance of the material.

A minimum of three samples were collected of each homogeneous material. Depending on the quantity of homogeneous material, additional samples may be collected to avoid the possibility of false negative results.

LABORATORY PROCEDURES

Method of Analysis

Analysis was performed by visually observing the bulk sample and preparing slides for microscopic examination and identification. The samples were mounted on slides and then analyzed for asbestos (chrysotile, amosite, crocidolite, anthophyllite, and actinolite/tremolite), fibrous non-asbestos constituents (mineral wool, paper, etc.) and nonfibrous constituents. Asbestos was identified by refractive indices, morphology, color, pleochroism, birefringence, extinction characteristics, and signs of elongation. The same characteristics were used to identify the non-asbestos constituents.

The microscopist used a stereoscope to visually estimate relative amounts of each constituent using a stereoscope to determine the volume of each constituent in proportion to the total volume of the sample.

All bulk samples were analyzed by Polarized Light Microscopy (PLM) with dispersion staining as described by the Interim Method of the Determination of Asbestos in Bulk Insulation, Federal Register, 40 CFR Ch. 1 Pt. 763, App. A to Subpart. F, July 1, 1987. This is a standard method of analysis in optical mineralogy and the currently accepted method for the determination of asbestos in bulk samples. A suspect material is immersed in a solution of known refractive index and subjected to illumination by polarized light. The characteristic color displays that result enable mineral identification. It should be noted that some ACM may not be accurately identified or quantified by PLM. As an example, the original fabrication of vinyl floor tiles routinely involved milling of asbestos fibers to extremely small sizes. As a result, these fibers may go undetected under the standard polarized light microscopy method. Transmission Electron Microscopy (TEM) is recommended for a more definitive analysis of these materials. MTGL, Inc. has no control over how the laboratory describes materials or layers of materials being analyzed. Although a minimum of three samples are collected of suspect building materials, first positive stops may be requested of the laboratory and the results of the one positive sample will be reported. All other homogeneous materials will be assumed to be positive for asbestos content.

Laboratory Quality Control Program

MTGL, Inc. only uses laboratories that maintain an in-house quality control program. This program involves blind reanalysis of ten percent of all samples, precision and accuracy controls, and use of standard bulk reference materials.

SECTION 4 ASBESTOS OBSERVATIONS AND FINDINGS

SUMMARY

Table 1: Positively Identified Materials that Contain Asbestos (ACM and ACCM) and Assessment of Material Condition (as of the date the survey was conducted). Laboratory Results can be found in Appendix 1.

Material* Description	Location*	Sample #	Approximate Quantity**	AHERA Rank***	Friability/ Material Type	Damage Category	Quantity of Contamination (If any) **	Asbestos Content
2'x4' Fissured Ceiling Tile	Throughout	1, 2	2,000	7	Friable	1	None	2-3%
Cove Base Adhesive	Throughout	28, 29, 30	100	X	Non-Friable	1	None	Tan Adhesive None Detect Brown Mastic <1% Brown Cove Base None Detect

*Positively identified ACM and ACCM that are similar in color and texture in other locations throughout the structure and facility shall be considered as asbestos containing until further sampling/analysis determines otherwise. In the event suspect asbestos containing materials are discovered during maintenance, renovation and/or demolition that are not identified in this report, disturbance of the materials should be stopped until further assessment of the material for asbestos content can be conducted.

**MTGL, Inc. is not responsible for actual quantity of the material(s). MTGL recommends bidding contractors measure and calculate quantities for estimated abatement costs and notifications. (sf= square foot; NA= not applicable))

***Each homogeneous area of friable and non-friable asbestos-containing material (ACM) was classified into one of the following seven categories, as specified in EPA's AHERA regulations (40 CFR 763.88):

- (1) Damaged or significantly damaged thermal system insulation ACM.
- (2) Damaged friable surfacing ACM.
- (3) Significantly damaged friable surfacing ACM.
- (4) Damaged or significantly damaged friable miscellaneous ACM.
- (5) ACBM with potential for damage.
- (6) ACBM with potential for significant damage.
- (7) Any remaining friable ACBM or friable suspected ACBM.
- (X) Not applicable (material is non-friable surfacing or miscellaneous material).

The damage categories are defined as follows:

Category 1 - "Undamaged" means the material had no visible damage, or extremely minor damage or surface marring (i.e., a room full of floor tile with only two or three small corners chipped off on the tile).

Category 2 - "Damaged" means the material had visible damage evenly distributed over less than 10% of its surface, or localized over less than 25% of its surface.

Category 3 -"Significantly Damaged" means the material had visible damage that is evenly distributed over 10% or more of its surface, or localized over 25% or more if its surface.

Table 2: Materials found to be Negative for Asbestos (as of the date the survey was conducted). Laboratory results can be found in Appendix 1.

Material* Description	Sample #
Fiberglass Insulation	4,5,6
Concrete Block	7,8,9
6"x6" Ceramic Tile and Mortar and Grout	10,11,12
Ceramic Tile and Grout	13,14,15
Concrete Ceiling	16,17,18
Concrete Floor	19,20, 21
HVAC Caulk	22,23,24 47, 48, 49
Carpet Adhesive	25,26,27
Exterior Concrete Block	31,32,33
Exterior Concrete Wall	34,35,36
Textured Concrete (Soffit)	37,38,39
Silver Coated Rolled Roofing	41, 42, 43
Siver Coated Roof Mastic	44, 45, 46

GENERAL INFORMATION

Environmental Protection Agency (EPA)

According to the South Coast Air Quality Management District's Rule 1402paragraph (H)(2)(C), the analysis of composite samples of multi-layered material including, but not limited to, stucco (base and scratch coat) and wall systems is prohibited for the quantification of asbestos content. All separable layers shall be analyzed and reported separately for asbestos content.

These materials are eligible for analyzed using 1,000 Point Count with Gravimetric Reduction methods. Analysis would be conducted per strata and materials found to be greater than 0.1% asbestos are regulated by OSHA and handled as asbestos containing until packaged and stored for disposal. Materials greater than 1% are regulated by EPA/APCD and would require disposal as asbestos containing material.

A material is considered by the EPA and the State of California to be asbestos-containing if at least one sample collected from the area shows asbestos present in an amount greater than one percent (>1%).

California Occupational Safety & Health Agency (Cal/OSHA)

Title 8, California Code of Regulation 1529 defines asbestos-containing construction materials as materials containing greater than one-tenth of one percent (0.1%) asbestos by weight. Under this code, materials containing between 0.1% and 1% asbestos are regulated as other regulated operations. Although operations involving materials containing between 0.1% and 1% asbestos are not considered Class I, II, or III work, several sections of the standard are applicable, including negative exposure assessments and the use of regulated areas.

Laboratory analysis may report materials as "Trace Asbestos". These materials are assumed to be greater than 0.1%. Upon client request, these materials can be analyzed using 1,000 Point Count with Gravimetric Reduction methods. Materials found to be greater than 0.1% asbestos are regulated by OSHA and handled as asbestos containing until packaged and stored for disposal.

Please refer to the laboratory analysis for a more detailed description of the microscopic analysis of these samples.

Asbestos-containing materials (ACM) are regulated by federal, state, and local agencies, which include but may not be limited to the following:

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) requires an inspection for asbestos be done on facilities that are to undergo demolition or renovation work. Materials found to contain asbestos may need to be removed prior to the start of such demolition/renovation work.

NESHAP defines Category I non-friable asbestos-containing materials as gaskets, resilient floor covering, and asphalt roofing products that contain more than one percent asbestos, and Category II non-friable as any materials, except for Category I non-friable, that contain more than one percent asbestos and cannot be reduced to a powder by hand pressure when dry. NESHAP defines a Regulated Asbestos-Containing Material (RACM) as: (a) friable ACM, (b) Category I non-friable that has become friable, (c) Category I non-friable that has or may be subject to sanding, grinding, cutting, or abrading, and (d) Category II non-friable that may or has become friable during demolition or renovation.

SECTION 5 CONCLUSIONS & RECOMMENDATIONS

CONCLUSIONS

On this asbestos survey, materials observed and tested for asbestos were positive for asbestos content.

The 2'x4' fissured ceiling tiles throughout is greater than 1% asbestos and is considered a regulated asbestos containing material. The cove base mastic throughout is less than 1% asbestos and is considered an asbestos containing construction material.

RECOMMENDATIONS

If during renovation activities, materials other than the ones discussed in this report are observed, the materials should be tested for asbestos content prior to disturbance.

General

MTGL recommends that all asbestos containing materials be removed prior to any renovation and/or demolition activities, which may impact the materials. A Licensed Abatement Contractor in the State of California should perform the removal activities.

Removal of ACM/ACCM should be conducted in accordance with EPA and OSHA requirements for Federal, State and Local rules and regulations. All asbestos removal should be conducted using wet methods and engineering controls to reduce airborne fiber concentrations. OSHA required personal protective equipment must be used for worker protection.

All activities that may disturb or disrupt asbestos containing material must be conducted in properly demarcated regulated areas using wet removal methods.

Proper decontamination methods must be used by all workers entering and leaving regulated work areas where asbestos containing materials are being removed.

In the event ACM or ACCM materials are observed to be damaged and/or visible contamination is present, isolate the immediate area, turn off HVAC systems. Only properly trained and certified workers may enter the work area to conducted clean-up activities using wet methods.

If renovation and/or demolition activities do not impact the asbestos containing materials, then the materials can be managed in place. Periodic surveillance is recommended. An Operations & Maintenance (O&M) program should be established and conducted by properly trained personnel. Minimum training for each type of material that has been identified should be given as required by Cal/OSHA. Additionally, postings would be required in all publicly accessible areas warning of the potential hazard to satisfy the Proposition 65 & Hazard Communication regulations.

SECTION 6 APPENDICES

APPENDIX 1 ASBESTOS LABORATORY RESULTS & CHAIN OF CUSTODY



Report for:

Mr. Carl Tucker MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126

Eurofins EPK Built Environment Testing, LLC Project: Vanir Const. - OC Juvenile Hall; 331 The City of Orange B6 Regarding:

EMĹ ID: 3592262

Approved by:

Dates of Analysis: Asbestos PLM: 04-04-2024

EMLab ID: 3592262, Page 1 of 11

Approved Signatory Carlos Rivadeneyra

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267) NVLAP Lab Code 500034-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Date of Sampling: 03-27-2024 Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of Orange B6

ASBESTOS PLM REPORT

Total Samples Submitted: 39 **Total Samples Analyzed:** 39

Lab ID-Version 1: 17567690-1

Lab ID-Version : 17567692-1

Lab ID-Version : 17567693-1

EMLab ID: 3592262, Page 2 of 11

Total Samples with Layer Asbestos Content > 1%:

Location: 1, 2'x4' Fissured Ceiling Tile

Location: 1, 2 x4 Tissurea Cennig The	240 12 (0101014, 170070)0 1
Sample Layers	Asbestos Content
Gray Ceiling Tile with White Surface	3% Amosite
Composite Non-Asbestos Content:	70% Cellulose 10% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 2, 2'x4' Fissured Ceiling Tile

Location: 2, 2'x4' Fissured Ceiling Tile	Lab ID-Version‡: 17567691-1
Sample Layers	Asbestos Content
Gray Ceiling Tile with White Surface	2% Amosite
Composite Non-Asbestos Content:	70% Cellulose
_	10% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 3, 2'x4' Fissured Ceiling Tile

, 6	
Sample Layers	Asbestos Content
Gray Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	80% Cellulose
•	10% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 4, Fiberglass Ins

Sample Layers	Asbestos Content
Yellow Insulation	ND
Composite Non-Asbestos Content:	99% Glass Fibers
Sample Composite Homogeneity:	Good

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

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Lab ID-Version‡: 17567696-1

Lab ID-Version 1: 17567697-1

EMLab ID: 3592262, Page 3 of 11

Date of Sampling: 03-27-2024 Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B6

ASBESTOS PLM REPORT

Location: 5, Fiberglass Ins

Location: 5, Fiberglass Ins	Lab ID-Version‡: 17567694-1
Sample Layers	Asbestos Content
Yellow Insulation	ND
Composite Non-Asbestos Content:	99% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 6, Fiberglass Ins	Lab ID-Version‡: 17567695-1
Sample Layers	Asbestos Content
Yellow Insulation	ND
Composite Non-Asbestos Content:	99% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 7, Concrete Block

Sample Layers	Asbestos Content
Gray Concrete	ND
White Paint	ND
Sample Composite Homogeneity:	Good

Location: 8, Concrete Block

Sample Layers	Asbestos Content
Gray Concrete	ND
Tan Paint	ND
Sample Composite Homogeneity:	Good

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Lab ID-Version‡: 17567698-1

Lab ID-Version 1: 17567699-1

Lab ID-Version 1: 17567700-1

Lab ID-Version 1: 17567701-1

EMLab ID: 3592262, Page 4 of 11

C/O: Mr. Carl Tucker Date of Sampling: 03-27-2024 Re: Vanir Const. - OC Juvenile Hall; 331 The City of Date of Receipt: 03-30-2024 Orange B6 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Client: MTGL, Inc.

Location: 9, Concrete Block

Sample Layers	Asbestos Content
Gray Concrete	ND
White Paint	ND
Sample Composite Homogeneity: Good	

Location: 10. 6"x6" Ceramic Tile and Mortar

Escurion: 10, 6 As Cerumic The una mortun	
Sample Layers	Asbestos Content
Light Gray Cementitious Material	ND
Dark Gray Mortar	ND
White Ceramic Tile	ND
Sample Composite Homogeneity	v: Poor

Location: 11, 6"x6" Ceramic Tile and Mortar

Sample Layers	Asbestos Content
Light Gray Cementitious Material	ND
Dark Gray Mortar	ND
White Ceramic Tile	ND
Sample Composite Homogeneity:	Poor

Location: 12, 6"x6" Ceramic Tile and Mortar

Zocation, 12, 0 no ceramic the and mortal	· · · · · · · · · · · · · · · · · · ·
Sample Layers	Asbestos Content
White Grout	ND
Light Gray Cementitious Material	ND
Dark Gray Mortar	ND
White Ceramic Tile	ND
Sample Composite Homogeneit	y: Poor

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‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

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Lab ID-Version 1: 17567703-1

Lab ID-Version 1: 17567704-1

Lab ID-Version 1: 17567705-1

EMLab ID: 3592262, Page 5 of 11

C/O: Mr. Carl Tucker Re: Vanir Const. - OC Juvenile Hall; 331 The City of Orange B6

Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

Date of Sampling: 03-27-2024

ASBESTOS PLM REPORT

Client: MTGL, Inc.

Location: 13. Ceramic Tile and Grout

Location: 13, Ceramic Tile and Grout	Lab ID-Version‡: 17567702-1
Sample Layers	Asbestos Content
Light Gray Cementitious Material	ND
Dark Gray Grout	ND
Beige Ceramic Tile	ND
Sample Composite Homogeneity: Poor	

Location: 14. Ceramic Tile and Grout

Zocation 11, octamic The and Group	
Sample Layers	Asbestos Content
Light Gray Cementitious Material	ND
Dark Gray Grout	ND
Beige Ceramic Tile	ND
Sample Composite Homogeneity: Poor	

Location: 15. Ceramic Tile and Grout

Sample Layers	Asbestos Content
Light Gray Cementitious Material	ND
Dark Gray Grout	ND
Beige Ceramic Tile	ND
Sample Composite Homogeneity: Poor	

Location: 16. Concrete Ceiling

	•
Sample Layers	Asbestos Content
Gray Concrete	ND
White Paint	ND
Sample Composite Homogeneity:	Good

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Lab ID-Version‡: 17567706-1

Lab ID-Version :: 17567708-1

EMLab ID: 3592262, Page 6 of 11

Client: MTGL, Inc. C/O: Mr. Carl Tucker Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B6

Date of Sampling: 03-27-2024 Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 17, Concrete Ceiling

Sample Layers	Asbestos Content
Gray Concrete	ND
White Paint	ND
Sample Composite Homogeneity:	Good

Location: 18, Concrete Ceiling	Lab ID-Version‡: 17567707-1
Sample Layers	Asbestos Content
Gray Concrete	ND
White Paint	ND
Sample Composite Homogeneity:	Good

Location: 19. Interior Concrete Floor

	•
Sample Layers	Asbestos Content
Tan Concrete	ND
Sample Composite Homogeneity:	Good

Location: 20, Interior Concrete Floor	Lab ID-Version‡: 17567709-1
Sample Layers	Asbestos Content
Tan Concrete	ND
Sample Composite Homogeneity:	Good

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EMLab ID: 3592262, Page 7 of 11

Client: MTGL, Inc. C/O: Mr. Carl Tucker Date of Sampling: 03-27-2024 Re: Vanir Const. - OC Juvenile Hall; 331 The City of Date of Receipt: 03-30-2024 Orange B6 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 21. Interior Concrete Floor

Location: 21, Interior Concrete Floor	Lab ID-Version‡: 17567710-1
Sample Layers	Asbestos Content
Tan Concrete	ND
Sample Composite Homogeneity:	Good

Location: 22, HVAC Caulk Lab ID-Version : 17567711-1

Sample Layers	Asbestos Content
Gray Caulk	ND
Sample Composite Homogeneity:	Good

Location: 23, HVAC Caulk Lab ID-Version : 17567712-1

Sample Layers	Asbestos Content
Gray Caulk	ND
Sample Composite Homogeneity:	Good

Location: 24, HVAC Caulk Lab ID-Version : 17567713-1

Sample Layers	Asbestos Content
Gray Caulk	ND
Sample Composite Homogeneity:	Good

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Lab ID-Version : 17567715-1

Lab ID-Version : 17567716-1

EMLab ID: 3592262, Page 8 of 11

Client: MTGL, Inc. C/O: Mr. Carl Tucker Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B6

Date of Sampling: 03-27-2024 Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 25, Carpet Adhesive

Location: 25, Carpet Adhesive	Lab ID-Version‡: 17567714-1
Sample Layers	Asbestos Content
Tan Carpet Adhesive	ND
Sample Composite Homogeneity:	Good

Location: 26, Carpet Adhesive

Sample Layers	Asbestos Content
Tan Carpet Adhesive	ND
Sample Composite Homogeneity:	Good

Location: 27, Carpet Adhesive

Sample Layers	Asbestos Content
Tan Carpet Adhesive	ND
Sample Composite Homogeneity:	Good

Location: 28. Cove Base Adhesive

Location: 28, Cove Base Adhesive	Lab ID-Version‡: 17567717-1
Sample Layers	Asbestos Content
Brown Mastic	< 1% Anthophyllite
Tan Cove Base Adhesive	ND
Composite Non-Asbestos Content:	3% Talc
Sample Composite Homogeneity:	Moderate

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Lab ID-Version 1: 17567719-1

Lab ID-Version‡: 17567720-1

Lab ID-Version 1: 17567721-1

EMLab ID: 3592262, Page 9 of 11

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B6

Date of Sampling: 03-27-2024 Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 29. Cove Base Adhesive

Location: 29, Cove Base Adhesive	Lab ID-Version‡: 17567718-1
Sample Layers	Asbestos Content
Brown Mastic	< 1% Anthophyllite
Tan Cove Base Adhesive	ND
Composite Non-Asbestos Content:	3% Talc
Sample Composite Homogeneity:	Moderate

Location: 30, Cove Base Adhesive

Zocation, co, co to Base Hanesi to	
Sample Layers	Asbestos Content
Brown Mastic	< 1% Anthophyllite
Tan Cove Base Adhesive	ND
Brown Cove Base (Trace)	ND
Composite Non-Asbestos Content:	3% Talc
Sample Composite Homogeneity:	Moderate

Location: 31, Ext Concrete Block

Sample Layers	Asbestos Content
Gray Concrete	ND
Beige Paint	ND
Sample Composite Homogeneity:	Good

Location: 32. Ext Concrete Block

	•
Sample Layers	Asbestos Content
Gray Concrete	ND
Beige Paint	ND
Sample Composite Homogeneity:	Good

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Lab ID-Version t: 17567722-1

Lab ID-Version 1: 17567723-1

Lab ID-Version 17567724-1

Client: MTGL, Inc. C/O: Mr. Carl Tucker Date of Sampling: 03-27-2024 Re: Vanir Const. - OC Juvenile Hall; 331 The City of Orange B6

Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 33. Ext Concrete Block

Location: 33, Ext Concrete Block	Dao 15 Version 4. 1750/722 1
Sample Layers	Asbestos Content
Gray Concrete	ND
Beige Paint	ND
Sample Composite Homogeneity:	Good

Location: 34. Ext Concrete Wall

Location, c ii Like Concrete ii uni	· · · · · · · · · · · · · · · · · · ·
Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 35. Ext Concrete Wall

Sample Layers	Sample Layers Gray Concrete ND Sample Composite Homogeneity: Good
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 36. Ext Concrete Wall

Location: 36, Ext Concrete Wall	Lab ID-Version‡: 17567725-1
Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

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Lab ID-Version‡: 17567726-1

Lab ID-Version 1: 17567727-1

Lab ID-Version 1: 17567728-1

C/O: Mr. Carl Tucker Date of Sampling: 03-27-2024 Re: Vanir Const. - OC Juvenile Hall; 331 The City of Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Client: MTGL, Inc.

Orange B6

Location: 37, Textured Concrete

Sample Layers	Asbestos Content
Light Gray Concrete	ND
Gray Paint	ND
Sample Composite Homogeneity:	Good

Location: 38. Textured Concrete

	•
Sample Layers	Asbestos Content
Light Gray Concrete	ND
Gray Paint	ND
Sample Composite Homogeneity:	Good

Location: 39. Textured Concrete

Sample Layers	Sample Layers Asbestos Content Light Gray Concrete ND Gray Paint ND Sample Composite Homogeneity: Good
Light Gray Concrete	ND
Gray Paint	ND
Sample Composite Homogeneity:	Good

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CHAIN OF CUSTODY 💸 eurofins

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Built Environment Testing

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Ď,	Moderate					
LEVE	Heavy					

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Non-Culturable

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Project ID: Vanir Coust OcTowence Hall Project Description: 331 The City of Orange 86 Project 92868 Sampling Date Fine: 53-27-24 PO Number: 508-24-061.107 By: DB/ME		STD - Standard (Default) ND - Next Business Day SD - Same Business Day WH - Weekend/Holiday/ASAP		Rushes received after 2pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.		ysis	NC EXEM (e spore count direct	racterization	Surface Fungi (Genus	Culturable Air Fungi (Genus IO * Asyr Gram Stain and Counts (Culturable Air	Legionaria culture	u S	OTHER (please specify test)	Asbestos in Air - PCM Airborne Fiber	bestos Bulk - PLM ad (Pb) - Flame AA	PCR (please specify test)	Alergens (please specify test)			
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vww.eurofinsus.com/Bui :ast: (866) 871-1984 Central: (800) 651-4802 Vest: (866) 888-6653	ilt		山山 Light Moderate Heavy			Spore Trap	Tap Swab,	e. E	BioCasset Swab, Wa	on I	00359	226	52	
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SAS - Surface Air Sampler B - Bulk

NP - Non-potable Water

SO - Soil

P - Potable Water D - Dust

CHAIN OF CUSTODY 💸 eurofins

Built Environment Testing

WEATHER Fog Rain Snow Wind Clear None

REQUES

ww.eurofinsus.com ast: (866) 871-1984 entral: (800) 651-48 Jest: (866) 888-6653	02	uilt Environment Testin	図 Mone Light Moderate Heavy		Spore Trap		ape. b, Bull	Cine	assette	ut O	0359			
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ontact. CAR	TGL, Inc. UTUCKU -454-7851 PROJECT INFORMATION	Address: 7742 / Special Instructions:		San Diago (4 192126 TIME CODES - (TAT)		ative)	хагл	ID + Asp spp.1	spp.) r and Surface	(Absence)		Count (NIOSH		
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Report for:

Mr. Carl Tucker MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126

Eurofins EPK Built Environment Testing, LLC Project: Vanir Const. - OC Juvenile Hall; 331 The City of Orange B6 Regarding:

EMĹ ID: 3600734

Approved by:

Dates of Analysis: Asbestos PLM: 04-11-2024

Approved Signatory Carlos Rivadeneyra

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267) NVLAP Lab Code 500034-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Date of Sampling: 04-02-2024 Date of Receipt: 04-08-2024 Date of Report: 04-11-2024

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B6

ASBESTOS PLM REPORT

Total Samples Submitted: 9 **Total Samples Analyzed:** 9

Total Samples with Layer Asbestos Content > 1%: 0

Location: 41, Rolled Roofing	Lab ID-Version‡: 17610942-1			
Sample Layers	Asbestos Content			
Silver Coating	ND			
Black Roofing Mastic	ND			
Black Roofing Mastic 2	ND			
Brown Insulation	ND			
Composite Non-Asbestos Content:	15% Cellulose			
Sample Composite Homogeneity:	Poor			

Location: 42, Rolled Roofing

Lab ID-Version : 17610943-1

Sample Layers	Asbestos Content
Silver Coating	ND
Black Roofing Shingle	ND
Black Roofing Tar	ND
Black Roofing Shingle 2	ND
Black Roofing Tar 2	ND
Composite Non-Asbestos Content:	8% Glass Fibers
Sample Composite Homogeneity:	Poor

Location: 43, Rolled Roofing

Sample Layers	Asbestos Content
Silver Coating	ND
Black Roofing Shingle	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt 2	ND
Brown Insulation	ND
Composite Non-Asbestos Content:	15% Cellulose 12% Glass Fibers
Sample Composite Homogeneity:	Poor

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B6

Date of Sampling: 04-02-2024 Date of Receipt: 04-08-2024 Date of Report: 04-11-2024

ASBESTOS PLM REPORT

Location: 44, Roof Mastic Lab ID-Version : 17610945-1

Sample Layers	Asbestos Content				
Silver Coating	ND				
Black Roofing Mastic	ND				
Composite Non-Asbestos Content:	3% Glass Fibers				
Sample Composite Homogeneity:	Moderate				

Location: 45, Roof Mastic

Lab ID-Version : 17610946-1

Sample Layers	Asbestos Content				
White Paint	ND				
Silver Coating	ND				
Black Roofing Mastic	ND				
Composite Non-Asbestos Content:	5% Glass Fibers				
Sample Composite Homogeneity:	Moderate				

Location: 46, Roof Mastic

Lab ID-Version : 17610947-1

EMLab ID: 3600734, Page 3 of 4

Sample Layers	Asbestos Content			
Silver Coating	ND			
Black Roofing Mastic	ND			
Composite Non-Asbestos Content:	3% Glass Fibers			
Sample Composite Homogeneity:	Moderate			

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9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Lab ID-Version : 17610948-1

Lab ID-Version 1: 17610949-1

Lab ID-Version †: 17610950-1

EMLab ID: 3600734, Page 4 of 4

C/O: Mr. Carl Tucker Date of Sampling: 04-02-2024 Re: Vanir Const. - OC Juvenile Hall; 331 The City of Date of Receipt: 04-08-2024 Date of Report: 04-11-2024

ASBESTOS PLM REPORT

Client: MTGL, Inc.

Orange B6

Location: 47, HVAC Seam Caulk

Sample Layers	Asbestos Content
Gray Non-Fibrous Material (HVAC Seam)	ND
Sample Composite Homogeneity:	Good

Location: 48, HVAC Seam Caulk

Sample Layers	Asbestos Content
Gray Non-Fibrous Material (HVAC Seam)	ND
Sample Composite Homogeneity:	Good

Location: 49 HVAC Seam Caulk

Location: 47, 11 vAc Scam Caurk	Lab ID Version 4. 17010930 1
Sample Layers	Asbestos Content
Gray Non-Fibrous Material (HVAC Seam)	ND
Sample Composite Homogeneity:	Good

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

 \ddagger A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Eurofins EPK Built Environment Testing, LLC

CHAIN	OF	CUSTODY	1.33	eurofins
COC 11 411 4	200			CHIVITIES

www.eurofinsus.com/Built

East: (866) 871-1984 Central: (800) 651-4802 Built Environment Testing

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斑	Light					
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REQUI Non-Culturable



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PROJECT INFORMATION TURN AROUND TIME CODES - (TAT)								ive)	E	- As	181	heam		200		П		
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SAMPLE ID DESCRIPTION Type		100000000000000000000000000000000000000						Other biolog	Quantitative	1-Media Su	Culturable /	Oriella	Cuantifray-Sewage OTHER (please spe	Asbestos in	8 6	PCR (pleas	Allergens (p.	
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By submitting this Chain of Custody, you agree to be bound by the terms and conditions set forth at: https://www.eurofinsus.com/environment-testing/built-environment/resources/sampling-guides-and-forms GCOPYRIGHT 2022 EUROFINS EPK BUILT ENVIRONMENT TESTING, LLC

United States Department of Commerce National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 500034-0

Eurofins EMLab P&K

San Diego, CA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2024-01-01 through 2024-12-31

Effective Dates



For the National Voluntary Laboratory Accreditation Program



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Eurofins EMLab P&K

9445 Farnham St #103 San Diego, CA 92123 Quynh Nguyen Phone: 800-651-4802

Email: quynh.nguyen@et.eurofinsus.com https://www.eurofinsus.com/environment-testing/

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 500034-0

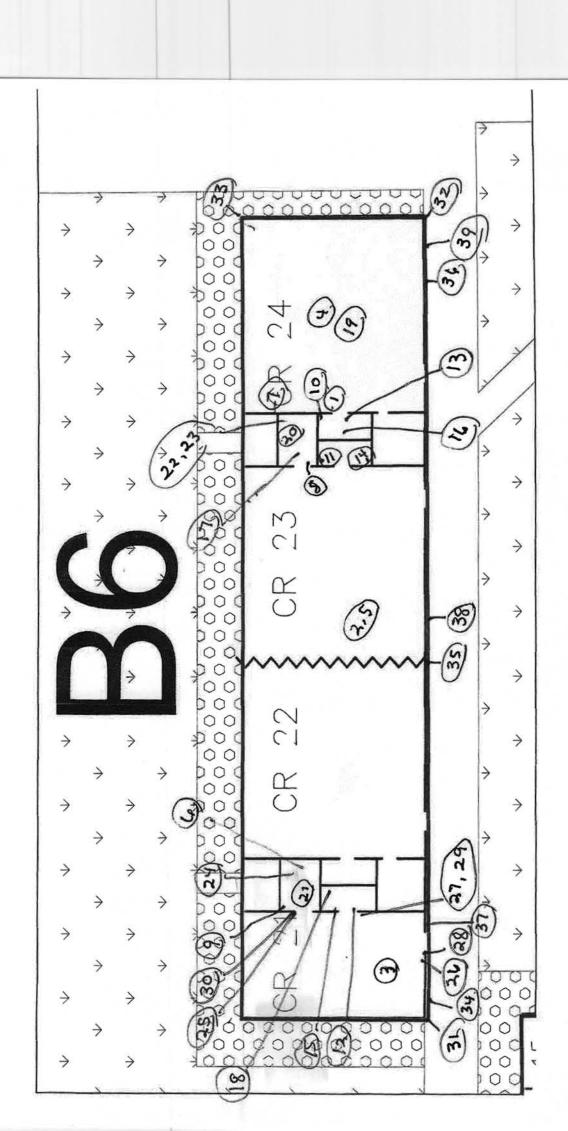
Bulk Asbestos Analysis

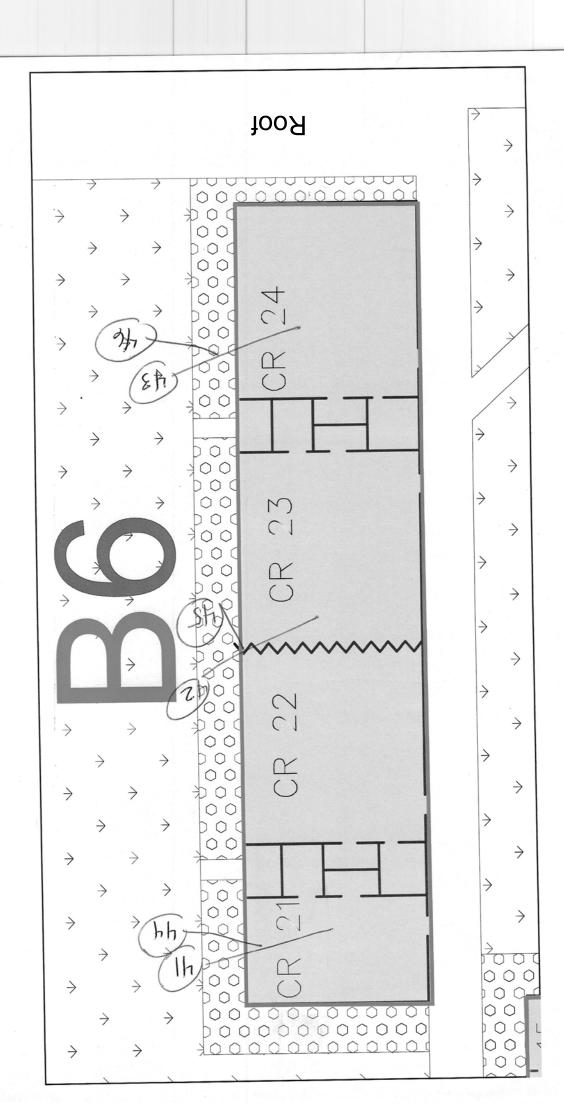
<u>Code</u>	<u>Description</u>
18/A01	EPA 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

For the National Voluntary Laboratory Accreditation Program

APPENDIX 2

SAMPLE LOCATION MAP (NOT TO SCALE)





APPENDIX 3 PHOTO DOCUMENTATION



1. Brick & mortar, concrete block, and texture coat (Soffit).



2. HVAC seam caulk.



3. Ceramic floor and wall tile & mortar, carpet adhesive, wall block, and concrete floor



4. Concrete ceiling.



5. Fissured ceiling tile, fiberglass insulation.



6. Typical view of classroom.



7. Typical View of Classroom

APPENDIX 4 INSPECTOR CERTIFICATIONS

California Certified Asbestos Consultant (CAC)

Card Holder: <u>Michelle Ehresman</u>

Certification Number: <u>14-5323</u> Exp.: <u>11/19/2024</u>

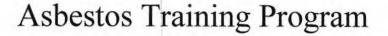
Current Employer: MTGL, Inc.

Supporting Certifications:

AHERA Contractor/Supervisor Refresher Certification
 AHERA Building Inspector Refresher Certification
 AHERA Management Planner Refresher Certification
 AHERA Project Designer Refresher Certification
 Exp. 7/27/2024
 Exp. 7/27/2024
 Exp. 8/16/2024



MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126 858-537-3999



This is to certify

Michelle Ehresman 1656

Has successfully completed 8 hours of formal training required by section 206 of TSCA II entitled

Contractor/Supervisor Refresher

Presented By **Environmental Compliance Training** PO BOX 16555 San Diego, CA. 92176-6555

(858) 558-7465

Director:

Walter T. Amenta, CIH, Approval Number CA-029-04

Class Dates:

06-24-2023

Exam Date:

n/a

Expiration Date: 06-24-2024

Certification Number: 0623ABCA167303

Asbestos Building Inspector Refresher Course

DOSH #: CA-015-06

Michelle Ehresman

ABIR0727230010N35227

David Wallach

Principal Instructor

7/27/2023

Course Start Date

7/27/2023

Course End Date

Michael W. Horner

Training Director

7/27/2023 Exam Date 7/27/2024

Expiration Date

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



NATEC International, Inc.

National Association of Training and Environmental Consulting



TIONAL 1100 Technology Circle, Suite A, Anaheim, CA 92805 · www.natecintl.com · 800-969-3228

Important Industry Contacts

CAL-OSHA:

Ph# (916) 574-2993

(916) 483-0572 Fax Notification Web: www.dir.ca.gov or calosha.com

CDPH/CLPPB:Ph# (510) 620-5600

Web: www.cdph.ca.gov/programs/CLPPB

SCAQMD:

Ph# (909) 396-3739

Fax#(909) 396-3342

BAAOMD:

Ph# (415) 749-4762

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PO Box 8657, Fountain Valley, CA 92728 (714) 678-2750, (800) 969-3228, Fax (714) 678-2757 www.natecintl.com

NATEC International, Inc.

National Association of Training and Environmental Consulting

This Card Acknowledges That Michelle Ehresman

Holds Training Certification For Asbestos Building Inspector Refresher Course

Expiration: 7/27/2024

ABIR0727230010N35227

Michael W. Horner Training Director

Asbestos Project Designer Refresher Course

DOSH #:CA-015-10

Michelle Ehresman

APDR0816230004N35415

Norm Kramer

Principal Instructor

8/16/2023 Course Start Date 8/16/2023

Course End Date

8/16/2023

Exam Date

Michael W. Horner

Training Director

8/16/2024

Expiration Date

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



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(916) 483-0572 Fax Notification

Web: www.dir.ca.gov or calosha.com

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Web: www.cdph.ca.gov/programs/CLPPB

SCAQMD:

Ph# (909) 396-3739 Fax#(909) 396-3342

BAAQMD:

Ph# (415) 749-4762

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NATEC International, Inc.

National Association of Training and Environmental Consulting
*Note: Card is not suitable substitute for certificate and is not accepted by SCAQMD as proof of
certification
This Card Askinguidades That

This Card Acknowledges That Michelle Ehresman

Holds Training Certification For Asbestos Project Designer Refresher Course

Expiration: 8/16/2024

Training Date 8/16/2023 APDR0816230004N35415

Michael W. Horner Training Director

Asbestos Management Planner Refresher Course

DOSH #:CA-015-08

Michelle Ehresman

AMPR0727230007N35357

David Wallach

Principal Instructor

7/27/2023

Course Start Date

7/27/2023

Course End Date

7/27/2023 Exam Date

Training Director

Michael W. Horner

7/27/2024 **Expiration Date**

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



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SCAQMD:

Ph# (909) 396-3739 Fax#(909) 396-3342

BAAQMD:

Ph# (415) 749-4762

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This Card Acknowledges That Michelle Ehresman

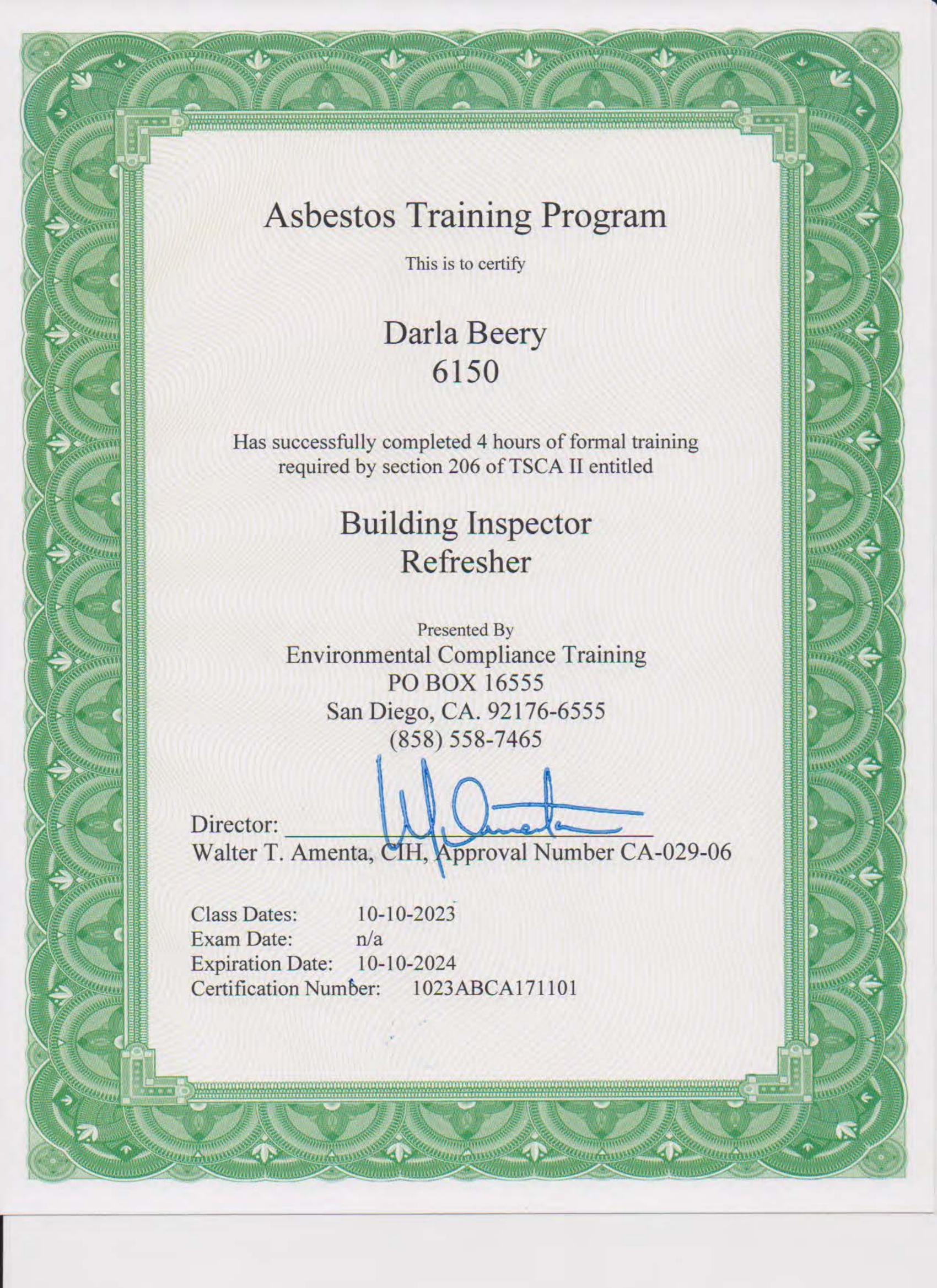
Holds Training Certification For Asbestos Management Planner Refresher Course

Expiration: 7/27/2024

7/27/2023 Training Date AMPR0727230007N35357 Certificate No.

Michael W. Homer Training Director

Darla Beery AHERA Building Inspector Certification





Geotechnical Engineering Construction Inspection Materials Testing Environmental

September 26, 2024

Office Locations

Orange County Corporate Branch

2992 E. La Palma Avenue Suite A

Anaheim, CA 92806

Tel: 714.632.2999 Fax: 714.632.2974

San Diego Imperial County

6295 Ferris Square Suite C San Diego, CA 92121

Tel: 858.537.3999 Fax: 858.537.3990

Inland Empire

14467 Meridian Pkwy. Building 2A Riverside, CA 92553

Tel: 951.653.4999 Fax: 951.653.4666

Central Dispatch

888.844.5060

www.mtglinc.com

Mr. Scott Battles Vanir Construction Management, Inc. 4540 Duckhorn Drive, Suite 300 Sacramento, CA 95834

Subject: Addendum to Asbestos Survey Report: Orange County Juvenile Hall

Building 6

Dated April 18, 2024

Re: Orange County Juvenile Hall-Building 6-Additional Testing

331 The City Drive, S (Building 6, Room 21)

Orange, California 92868

Dear Mr. Battles:

On September 12, 2024, MTGL collected additional samples of the cove base adhesive in Room 21 that was reported to contain <1% asbestos in the Asbestos Survey Report, dated April 18, 2024. The purpose of the testing was to try and duplicate the original results in order to point count the material to determine if asbestos less than 0.1% was reported by 1,000 point count analysis.

During the inspection MTGL's Inspector noted vinyl flooring underneath the carpeting that was not sampled during the initial visit. Homam Alfalahi, an AHERA Building Inspector (#ABII0513240002N39722) under the direction of Michelle Ehresman, an AHERA Building Inspector (#ABIR0718240013N39757) and Certified Asbestos Consultant (#14-5323) collected a total of six (6) bulk samples and submitted the material to Eurofins EMLab P&K, San Diego, California for analysis and evaluation of asbestos content using EPA Method 600/R-93/116, Polarized Light Microscopy.

The materials were in good condition at the time of the inspection.

SUMMARY OF SAMPLING & ANALYTIC RESULTS. The following table summarizes the laboratory's analytical results:

Asbestos:

Sample ID	Sample Matrix	Location	Asbestos Analytic Result*
1, 2, 3	Cove Base Glue	Classroom 21	No Asbestos Detected
			Yellow Mastic-ND
4, 5, 6	9"x9" Vinyl Floor Tile	Classroom 21	Result* No Asbestos Detected
			Black Mastic-2%

Note: The floor tile and mastic (approximately 365 square feet) is considered Category II-Non-Friable and was in good condition at the time of the inspection.

GENERAL INFORMATION

Environmental Protection Agency (EPA)

According to the South Coast Air Quality Management District's Rule 1402 paragraph (H)(2)(C), the analysis of composite samples of multi-layered material including, but not limited to, stucco (base and scratch coat) and wall systems is prohibited for the quantification of asbestos content. All separable layers shall be analyzed and reported separately for asbestos content.

These materials are eligible for analyzed using 1,000 Point Count with Gravimetric Reduction methods. Analysis would be conducted per strata and materials found to be greater than 0.1% asbestos are regulated by OSHA and handled as asbestos containing until packaged and stored for disposal. Materials greater than 1% are regulated by EPA/APCD and would require disposal as asbestos containing material.

A material is considered by the EPA and the State of California to be asbestos-containing if at least one sample collected from the area shows asbestos present in an amount greater than one percent (> 1%).

California Occupational Safety & Health Agency (Cal/OSHA)

Title 8, California Code of Regulation 1529 defines asbestos-containing construction materials as materials containing greater than one-tenth of one percent (0.1%) asbestos by weight. Under this code, materials containing between 0.1% and 1% asbestos are regulated as other regulated operations. Although operations involving materials containing between 0.1% and 1% asbestos are not considered Class I, II, or III work, several sections of the standard are applicable, including negative exposure assessments and the use of regulated areas.

Laboratory analysis may report materials as "Trace Asbestos". These materials are assumed to be greater than 0.1%. Upon client request, these materials can be analyzed using 1,000 Point Count with Gravimetric Reduction methods. Materials found to be greater than 0.1% asbestos are regulated by OSHA and handled as asbestos containing until packaged and stored for disposal.

Please refer to the laboratory analysis for a more detailed description of the microscopic analysis of these samples.

Asbestos-containing materials (ACM) are regulated by federal, state, and local agencies, which include but may not be limited to the following:

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) requires an inspection for asbestos be done on facilities that are to undergo demolition or renovation work. Materials found to contain asbestos may need to be removed prior to the start of such demolition/renovation work.

NESHAP defines Category I non-friable asbestos-containing materials as gaskets, resilient floor covering, and asphalt roofing products that contain more than one percent asbestos, and Category II non-friable as any materials, except for Category I non-friable, that contain more than one percent asbestos and cannot be reduced to a powder by hand pressure when dry. NESHAP defines a Regulated Asbestos-Containing Material (RACM) as: (a) friable ACM, (b) Category I non-friable that has become friable, (c) Category I non-friable that has or may be subject to sanding, grinding, cutting, or abrading, and (d) Category II non-friable that may or has become friable during demolition or renovation.

CONCLUSIONS

MTGL was unable to duplicate the same results for the cove base adhesive and therefore, the material shall remain to be considered an Asbestos Containing Construction Material (ACCM) as stated in the original survey report dated April 18, 2024.

In addition, the floor tile and mastic discovered underneath the carpeting material observed and tested for asbestos is positive for asbestos content greater than 1% asbestos by weight and is considered to an Asbestos Containing Material (ACM).

RECOMMENDATIONS

If during renovation activities, materials other than the ones discussed in this report are observed, the materials should be tested for asbestos content prior to disturbance.

INVESTIGATION LIMITATIONS

MTGL, Inc. did not conduct testing within interstitial wall cavities, ceiling plenums, HVAC ventilation systems or crawlspaces or other locations of the facility, outside of the Client specified areas.

The findings of this report are valid as of the date of the survey and sample collection. Changes in the condition of the property can occur with passage of time, whether they are due to natural processes or the works of man on this or adjacent properties. In addition, changes in the state-of-art technology and/or government codes may occur. Due to such changes, the findings of this report may be invalidated wholly or in part by conditions beyond our control. Due to changes that can occur over time, submittals of this report to Regulatory Agencies may require additional site visits and assessment to document current conditions.

The final assessment of the potential for the existence of hazardous contaminants at the site should be considered a professional opinion based on the data obtained during the investigation and should not be considered a definitive statement that a hazardous contaminant or conditions are, or is not, present in the area of study. These opinions have been derived in accordance with current standards of practice.

This report is intended solely for use by the parties to whom it is addressed. This report is not intended for and may not contain sufficient information for purposes other than qualitative evaluation of asbestos or conditions at the time of our evaluation. Reliance on this report for other purposes or by other parties shall be at the user's sole risk.

WARRANTY

MTGL, Inc. warrants that the findings contained herein have been prepared with the level of care and skill exercised by experienced and knowledgeable environmental consultants who are appropriately licensed or otherwise trained to perform asbestos inspections and assessments pursuant to the scope of work required on this project. MTGL's Asbestos Survey Reports are prepared by trained certified professionals without a conflict of interest in the demolition(s) or renovation project(s) as per the Business and Professions Code 7180 (BP7180).

MTGL, Inc. warrants that the findings contained herein have been prepared in general accordance with accepted professional practices as applied by similar professionals in the community at the time of its preparation. Changes in the state of the art or in applicable regulations cannot be anticipated and have not been addressed in this report.

The survey included inspection of visible and accessible materials. MTGL did not inspect or sample inaccessible areas and did not dismantle any part of the structure to survey inaccessible areas. For the

purpose of this warranty, inaccessible is defined as areas that could not be tested (sampled) without destruction of the structure or a portion of the structure. Inaccessible materials that are visible to MTGL's inspectors shall be assumed to be asbestos containing. No other warranty is expressed, or implied.

MTGL, Inc. appreciates the opportunity to be of service. If you have any questions or require additional information, please contact us at (858) 537-3999.

Sincerely, MTGL, INC

Michelle Ehresman, CAC 14-5323 Industrial Hygiene Services

Attachments:

Attachment 1: Laboratory Report and Chain of Custody

Attachment 2: Sample Location Map

Attachment 3: Inspector Certifications

Attachment 1

Laboratory Report &
Chain of Custody



Report for:

Mr. Carl Tucker MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126

Eurofins EPK Built Environment Testing, LLC

Regarding: Project: Vanir Cons-331 The City Drive, CR21; Asbestos Testing

EMĹ ID: 3779280

Approved by:

Dates of Analysis: Asbestos PLM: 09-17-2024

Approved Signatory Danny Li

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267) NVLAP Lab Code 200757-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Eurofins EPK Built Environment Testing, LLC

2841 Dow Avenue, Suite 300, Tustin, CA 92780 (833) 465-5857 www.eurofinsus.com/Built

Client: MTGL, Inc. C/O: Mr. Carl Tucker Date of Sampling: 09-12-2024 Re: Vanir Cons-331 The City Drive, CR21; Asbestos Date of Receipt: 09-12-2024 **Testing** Date of Report: 09-17-2024

ASBESTOS PLM REPORT

Total Samples Submitted: 6 **Total Samples Analyzed:** 6

Lab ID-Version‡: 18631716-1

EMLab ID: 3779280, Page 2 of 3

Total Samples with Layer Asbestos Content > 1%: 3

Location: 1, Cove Base Glue	Lab ID-Version‡: 18631715-1
Sample Layers	Asbestos Content
Light Brown Glue	ND
Dark Brown Glue	ND
Composite Non-Asbestos Content:	2% Talc
Sample Composite Homogeneity:	Moderate

Location: 2, Cove Base Glue

Sample Layers	Asbestos Content
Light Brown Glue	ND
Dark Brown Glue	ND
Composite Non-Asbestos Content:	2% Talc
Sample Composite Homogeneity:	Moderate

Location: 3, Cove Base Glue	Lab ID-Version‡: 18631717-1
Sample Layers	Asbestos Content
Light Brown Glue	ND
Dark Brown Glue	ND
Composite Non-Asbestos Content:	2% Talc
Sample Composite Homogeneity:	Moderate

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

All components not quantified as asbestos content and non-asbestos content are considered to be non-fibrous matrix components. Matrix components may include, but are not limited to, gypsum, paint, silicate minerals, vinyl, binder, calcium carbonate, tar, and foam.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Eurofins EPK Built Environment Testing, LLC

2841 Dow Avenue, Suite 300, Tustin, CA 92780 (833) 465-5857 www.eurofinsus.com/Built

Lab ID-Version : 18631719-1

EMLab ID: 3779280, Page 3 of 3

Client: MTGL, Inc.

C/O: Mr. Carl Tucker

Re: Vanir Cons-331 The City Drive, CR21; Asbestos

Date of Sampling: 09-12-2024

Date of Receipt: 09-12-2024

Date of Report: 09-17-2024

ASBESTOS PLM REPORT

Location: 4, 9x9 Tan VFT

Lab ID-Version:: 18631718-1

Sample Layers	Asbestos Content
Yellow Mastic	ND
Tan Floor Tile	3% Chrysotile
Black Mastic	2% Chrysotile
Sample Composite Homogeneity:	Moderate

Location: 5, 9x9 Tan VFT

Sample Layers	Asbestos Content
Yellow Mastic	ND
Tan Floor Tile	3% Chrysotile
Black Mastic	2% Chrysotile
Sample Composite Homogeneity:	Moderate

Location: 6, 9x9 Tan VFT

Sample Layers	Asbestos Content
Yellow Mastic	ND
Tan Floor Tile	3% Chrysotile
Black Mastic	2% Chrysotile
Sample Composite Homogeneity:	Moderate

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

All components not quantified as asbestos content and non-asbestos content are considered to be non-fibrous matrix components. Matrix components may include, but are not limited to, gypsum, paint, silicate minerals, vinyl, binder, calcium carbonate, tar, and foam.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

CHAIN OF CUSTODY 💸 eurofins

www.eurofinsus.com/Built

Built Environment Testing

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回	Light					
ώ.	Moderate					
-	Heavy					

Non-Culturable

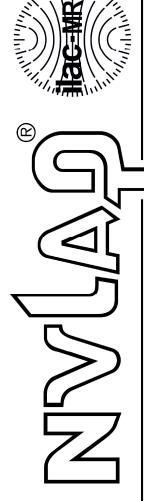
REQUESTED SERVIC	
Culturable	
BioCassette Andersen, SA:	003779280

003779280

East: (866) 871-1984		亘	Light		H
Central: (800) 651-4802		E	Moderate		ľ
West: (866) 888-6653			Heavy		
	CONTACT INFORMATION	-			

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Contact: C	arl Tucker		Special Instr	uctions:	jons Dr. Garri	Diego, C.	A 92120	1					908	Н		SH 7	Н		
Phone: (6	19) 454-7851											('dds	Surf			(NIO			
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SAMPLE ID	DESCRIF		Sample Type (Below)	TAT (Above)	Total Volume/Area (as applicable)	(Time of	NOTES day, Temp, RH, etc.)	Spore Trap	Other biolo Direct Micz	Quantitative spore count direct exam	Dust Characte	1-Media Surface Fungi	Outbrable Air Fungi (Genus ID + Asp. spp. Gram Stain and Counts (Culturable Air and	Legionella culture Total Coliform F.	QuantiTray-Sewage OTHER: (please sp	Asbestas in Air - PCM.	Asbestos Bulk - PLM Lead (Pb) - Flame AA	PCR (please specify test)	lergens (piease
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National Institute of Standards and Technology United States Department of Commerce



Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 200757-0

Eurofins EMLab P&K

Tustin, CA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2024-01-01 through 2024-12-31

Effective Dates



For the National Voluntary Laboratory Accreditation Program

National Voluntary Laboratory Accreditation Program



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Eurofins EMLab P&K

2841 Dow Avenue, Suite 300 Tustin, CA 92780 Quynh Nguyen Phone: 800-651-4802

Email: quynh.nguyen@et.eurofinsus.com www.eurofinsus.com

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 200757-0

Bulk Asbestos Analysis

<u>Code</u> <u>Description</u>

18/A01 EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of

Asbestos in Bulk Insulation Samples

18/A03 EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

Airborne Asbestos Analysis

<u>Code</u> <u>Description</u>

18/A02 U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and

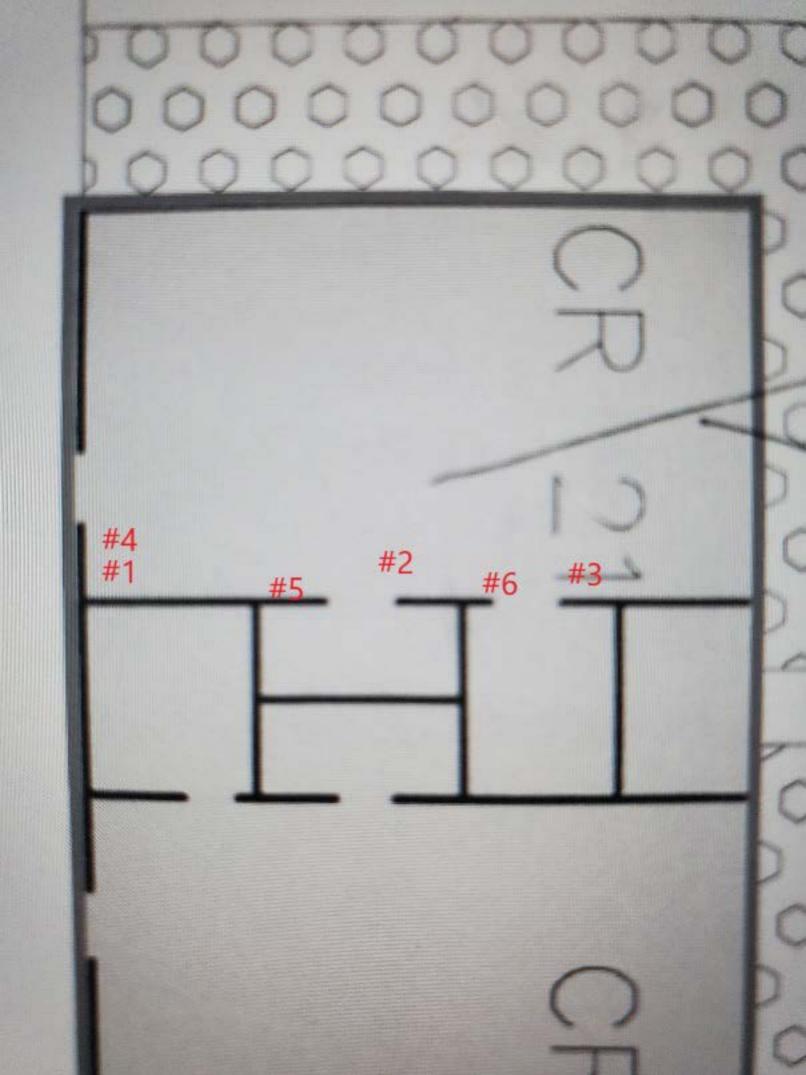
Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in

40 CFR, Part 763, Subpart E, Appendix A.

For the National Voluntary Laboratory Accreditation Program

APPENDIX 2

SAMPLE LOCATION MAP (NOT TO SCALE)



APPENDIX 3 INSPECTOR CERTIFICATIONS

California Certified Asbestos Consultant (CAC)

Card Holder: <u>Michelle Ehresman</u>

Certification Number: <u>14-5323</u> Exp.: <u>11/19/2024</u>

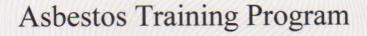
Current Employer: MTGL, Inc.

Supporting Certifications:

AHERA Contractor/Supervisor Refresher Certification
 AHERA Building Inspector Refresher Certification
 AHERA Management Planner Refresher Certification
 AHERA Project Designer Refresher Certification
 Exp. 7/18/25
 Exp. 7/18/25
 Exp. 7/31/25



MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126 858-537-3999



This is to certify

Michelle Ehresman 1656

Has successfully completed 8 hours of formal training required by section 206 of TSCA II entitled

Contractor/Supervisor Refresher

Presented By
Environmental Compliance Training
PO BOX 16555
San Diego, CA. 92176-6555
(858) 558-7465

Director:
Walter T. Amenta, CIH Approval Number CA-029-04

Class Dates: 06-29-2024

Exam Date: n/a

Expiration Date: 06-29-2025

Certification Number: 0624ABCA179303

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Asbestos Building Inspector Refresher Course

DOSH #: CA-015-06

Michelle Ehresman

ABIR0718240013N39757

David Wallach

Principal Instructor

Michael W. Horner

Training Director

7/18/2024

7/18/2024

7/18/2024

7/18/2025

Course Start Date

Course End Date

Exam Date

Expiration Date

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



NATEC International, Inc.

National Association of Training and Environmental Consulting



1100 Technology Circle, Suite A, Anaheim, CA 92805 • www.natecintl.com • 800-969-3228

Important Industry Contacts

CAL-OSHA: Ph# (916) 574-2993

(916) 483-0572 Fax Notification

Web: www.dir.ca.gov or calosha.com

CDPH/CLPPB:Ph# (510) 620-5600

Web: www.cdph.ca.gov/programs/CLPPB

SCAOMD: Ph# (909) 396-3739

Fax#(909) 396-3342

Ph# (415) 749-4762 BAAQMD:

NATEC International, Inc.

National Association of Training and Environmental Consulting

Asbestos • Lead • Mold • HAZWOPER

PO Box 8657, Fountain Valley, CA 92728 (714) 678-2750, (800) 969-3228, Fax (714) 678-2757 www.natecintl.com

NATEC International, Inc.

National Association of Training and Environmental Consulting
*Note: Card is not suitable substitute for certificate and is not accepted by SCAQMD as proof of

This Card Acknowledges That Michelle Ehresman

Holds Training Certification For Asbestos Building Inspector Refresher Course

7/18/2024 ABIR0718240013N39757

Michael W. Horner Training Director

Asbestos Management Planner Refresher Course

DOSH #: CA-015-08

Michelle Ehresman

AMPR0718240004N39808

David Wallach

Principal Instructor

Michael W. Horner

Training Director

7/18/2024

7/18/2024

7/18/2024

7/18/2025

Course Start Date

Course End Date

Exam Date

Expiration Date

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



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National Association of Training and Environmental Consulting



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certification

This Card Acknowledges That Michelle Ehresman

Holds Training Certification For Asbestos Management Planner Refresher Course

Training Date AMF

7/18/2024 AMPR0718240004N39808

Michael W. Horner Training Director

Asbestos Project Designer Refresher Course

DOSH #:CA-015-10

Michelle Ehresman

APDR0731240015N39853

David Wallach

Principal Instructor

7/31/2024 Course Start Date

Course End Date

7/31/2024

7/31/2024

Exam Date

Michael W. Horner

Training Director

7/31/2025

Expiration Date

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



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Homam Alfalahi AHERA Building Inspector Certification

Certificate Of Completion

Asbestos Building Inspector Initial Course

DOSH #: CA-015-05

Homam Alfalahi

ABII0513240002N39722

David Wallach

Principal Instructor

Michael W. Horner

Training Director

5/13/2024

5/15/2024

5/15/2024

5/15/2025

Course Start Date

Course End Date

Exam Date

Expiration Date

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



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Important Industry Contacts

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h# (916) 574-2993

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SCAQMD:

Ph# (909) 396-3739

Fax#(909) 396-3342

BAAQMD:

Ph# (415) 749-4762

NATEC International, Inc.

National Association of Training and Environmental Consulting

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PO Box 8657, Fountain Valley, CA 92728 (714) 678-2750, (800) 969-3228, Fax (714) 678-2757 www.natecintl.com

NATEC International, Inc.

National Association of Training and Environmental Consulting *Note: Card is not suitable substitute for certificatie and is not accepted by SCAQMD as proof of cartification.

This Card Acknowledges That Homam Alfalahi

Holds Training Certification For Asbestos Building Inspector Initial Course

Training Date

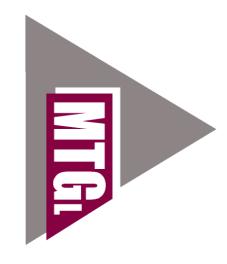
5/13/2024

ABII0513240002N39722

Michael W. Horner Training Director

LEAD-BASED PAINT INSPECTION REPORT

Juvenile Hall-Building 6-Classrooms 21, 22, 23, 24 331 The City Drive, S Orange, California 92868



Prepared for:

Vanir Construction 4540 Duckhorn Drive, Suite 300 Sacramento, California 95834

Prepared by:

MTGL, Inc. 7742 Arjons Drive San Diego, California 92126 858-537-3999

Project Number:

SDPE-24-061.1CT

Michelle Ehresman, CAC, LIA/LPM, ICRA Certification Number: CDPH# 0458/0459

Report Issuance Date: April 18, 2024

TABLE OF CONTENTS

SECTION

INTRODUCTION	
General Information	
Authorization Performance	
Terrormance	
WARRANTY	
METHODOLOGY	
General References	
Lead Sampling Procedures Performance Characteristic Sheets	
Performance Characteristic Sneets	
SUMMARY of FINDINGS	
Lead-Based Paint Summary	
HAZARD CONTROL AND ABATEMENT OPTIONS &LEAD SAFE WORK PRACTICES	
LEAD BASED PAINT DISCLOSURE	
APPENDICES	•••••
Appendix 1 –XRF Data Report and Performance Characteristic Sheet	
Appendix 2 – Site Drawing	
Appendix 3 – Glossary	
Appendix 4 – Inspector Certification	
Appendix 5 – CDPH 8552 Form	
Appendix 6 – Renovate Right	

GENERAL INFORMATION

MTGL was retained by Vanir Construction to conduct a lead-based paint inspection at the subject property located at 331 The City Drive in Orange, California 92868. All inspections were in accordance with the guidelines set forth in the U.S. Department of Housing and Urban Development. This document is prepared for the sole use of Vanir Construction and/or any Regulatory or Governmental agencies that may directly become involved with this project.

MTGL's scope of work was limited to the following Client specified locations at the property:

- Building 6 (Single story, wood frame with concrete block on a concrete slab.)
 - o Classrooms 21, 22, 23, 24

PURPOSE

The purpose of this inspection is to identify and assess painted components at the subject location above specified regulatory action levels within the Client specified scope of work.

AUTHORIZATION

Authorization to perform the survey was given by Mr. Scott Battles with a notice to proceed via proposal SDPE-24-061.1CT.

PERFORMANCE

All visual inspections and component testing was performed in accordance with Federal, State and local requirements. The inspection was performed by Michelle Ehresman, a California Certified Lead Inspector/Assessor on March 28, 2024.

LEAD-BASED PAINT SURVEY

MTGL, Inc. warrants that the findings contained herein have been prepared with the level of care and skill exercised by experienced and knowledgeable environmental consultants who are appropriately licensed or otherwise trained to perform lead-based paint assessments pursuant to the scope of work required on this project.

MTGL, Inc. warrants that the findings contained herein have been prepared in general accordance with accepted professional practices as applied by similar professionals in the community at the time of its preparation. Changes in the state of the art or in applicable regulations cannot be anticipated and have not been addressed in this report.

The survey included the inspection of accessible materials only. MTGL did not inspect or sample inaccessible areas such as behind walls or within ductwork and did not dismantle any part of the structure to survey inaccessible areas. For the purpose of this warranty, inaccessible is defined as areas of the building that could not be tested (sampled) without destruction of the structure or a portion of the structure. Inaccessible materials that are visible to MTGL inspectors shall be assumed to be lead-based paint coated.

It is the owner's legal obligation to disclose the inspection results to tenants and/or purchasers before obligation under 24 CFR part 35 and 40 CFR part 745 (published in the Federal Register, Volume 61, Number 45, March 6, 1996, starting on P. 9064; copies of the regulations and related materials can be obtained from the National Lead Information Center Clearinghouse, (1-800-424-LEAD)

GENERAL REFERENCES

LEAD-BASED PAINT

Lead-based paint testing was conducted in accordance with the Title 17, California Code of Regulations, Division 1, Chapter 8, Accreditation, Certification and Work Practices in Lead-Related Construction, Section 36000 and the United States Department of Housing and Urban Developments *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, Chapter 7 Lead-Based Paint Inspections*, as published in June 1995 and revised in 1997.

The State of California, HUD and the EPA currently define lead-based paint as paints or other surface coatings, which contain lead equal to or greater than 1.0 milligrams of lead per square centimeter of surface area (mg/cm²), or equal to or greater than 0.5% by weight.

Lead-based paint testing was conducted using portable x-ray fluorescence (XRF) spectrum analyzer, Model Niton XLP 300, Manufactured by Niton, Inc. The Niton XLP 300 is calibrated to measure the K-shell x-ray emissions of lead. The K-shell is normally used for paint analysis because it measures lead in all layers of paint films, including the lower layers where higher concentrations of lead are usually found. An initial calibration and ending calibration is validated each day with a laminated Lead Paint Standards testing card which is provided by the manufacturer. The card is a direct comparison to the paint standard to NIST kit SRM2579a with a spectrum analyzer. If an instrument does not maintain consistent calibrations after following the manufacturer's recommendation, the unit is removed from the site and sent back to the manufacturer for service.

In the instance where paint chip samples are collected, sample collections are conducted by the requirements of the American Society of Testing and Materials standard E 1729, Standard Practice for Field Collection of Dried Paint Samples for Lead Determination by Atomic Spectrometry Techniques and HUD Guidelines.

Performance Characteristic Sheet (PCS)

Performance Characteristic Sheets for most XRF models can be found on the U.S. Department of Housing and Urban Developments Office of Healthy Homes and Lead Hazard Control website, specifically HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.(http://www.hud.gov/offices/lead/lbp/hudguidelines/index.cfm).Operating specification and procedures for the XRF used for this survey can be downloaded at the website above. PCS's can also be obtained by calling toll free to the National Lead Information Clearinghouse, at 800-424-LEAD. Persons with hearing or speech impediments may access the above number via TTY by calling the Federal Information Relay Service at 800-887-8339, toll free.

GENERAL SUMMARY

Lead-Based Paint Inspection Results

The purpose of the lead-based paint survey was to evaluate the referenced facility's painted components that may contain lead-based paint. Suspect components identified during the survey included but not limited to the following:

- Interior: Door and Window Components, Wall, Floor and Ceilings
- Exterior: Wall, Windows and Doors

The following is a summary of lead based painted components identified that contain lead greater than 1.0 mg/cm² or greater * (Please see attachment I for a detail report of findings.)

- No lead-based paint was identified in the components tested.
- Intact lead containing ceramic wall, base tile was identified in the bathrooms of Classrooms 21, 22, 23 and 24.

*MTGL, Inc. is not responsible for actual quantity of the material(s). MTGL recommends bidding contractors to calculate quantities for estimated abatement costs. When evaluating this report, it is assumed that according to Chapter 7 HUD guidelines, that if one testing combination (i.e. window, door) is positive for lead in an interior or exterior room equivalent, that all other similar testing combinations in those areas are assumed to be positive.

Deteriorated lead-based paint was not identified on the accessible components tested however, lead containing yellow, ceramic wall base tile was identified and Title 8, CCR Section 1532.1 will apply.

When evaluating this report, it is assumed that according to Chapter 7 HUD guidelines, that if one testing combination (i.e. window, door) is positive for lead in an interior or exterior room equivalent, that all other similar testing combinations in those areas are assumed to be positive.

Current EPA and Cal/EPA regulations do not require lead-based paint to be removed prior to demolition, unless found to be loose and peeling. Provided that paints are securely adhered to the substrates, deposal of the debris can be handled in California as non-hazardous and non-RCRA waste, pending characterization of the waste.

Loose and peeling paints or other wastes exceeding the Total Threshold Level Concentration (TTLC) of 1,000 ppm ($\mu g/g$) would be required to be disposed of as non-RCRA hazardous waste. However, if the leachable lead contents of the wasted exceed the Soluble Threshold Level Concentrations (STLC) of 5 mg/liter, the wastes must be disposed of as RCRA waste.

Several government agencies have definitions for what amount of lead constitutes paint to be considered "lead-based". The Department of Housing and Urban Development (HUD) has designated the amount to be 1.0 mg/cm^{2,} 0.5% by weight or 5000 ppm (parts per million). The HUD regulations are related to potential hazards in the home environment and not to construction activities. The amount designated for high contact play areas is 400 ppm.

Lead Safe Work Practice Requirements for Maintenance, Renovation or Remodeling

EPA's RRP Rule requires anyone (remodeling, renovation and painting contractors and most other trades) who works in pre-1978 housing for compensation and who might disturb painted surfaces to become an EPA Certified Renovator by taking an 8-hour RRP "Lead Safe Work Practices" class from an EPA accredited training provider. The initial certification is good for five (5) years. To "renew" contractors must take a 4-hour RRP Refresher class before their initial certification expires. The RRP rule applies to anyone who works for compensation in pre-1978 housing and/or child-occupied facilities who might disturb painted surfaces, including:

- General contractors
- Demolition workers
- Remodeling contractors
- Maintenance workers in multi-family housing
- Painters, plumbers and most specialty trades.

The RRP rule covers a lot of jobs: renovation, remodeling, painting, window replacement, plumbing, electrical work, heating & air-conditioning, demolition, plus work performed by trades like carpenters, electricians and handymen. The rule also applies to persons working for rental property owners, schools, and day care providers. And, it applies to non-profits and governmental agencies. The RRP Rule requires that "Lead Safe Work Practices" be used when disturbing more than 6 square feet per room or 20 square feet outside.

It shall be noted that California's lead-based paint regulations cover ALL pre-78 structures that have not been tested - not just Target Housing and Child-Occupied Facilities. (Title 17, CCR, Div 1, Ch 8). Since 2003, California law (Title 17) has required that "Lead Safe Work Practices" be used in ALL pre-1978 structures when disturbing any amount of known or "presumed" lead-based paint. Contractors may have taken additional training to meet State of California requirements for Lead-Related Construction and obtain the required California Department of Public Health-Lead Related Construction Certifications for permanent abatement. This certification supplements but does not replace the EPA RRP certification. CDPH State Certified Lead Abatement Supervisors and Workers must also become RRP certified, and abatement firms must also be RRP Certified if they do non-abatement jobs.

Contractors and renovators who work or compensation in pre-1978 housing and/or a child-occupied facility that will disturb painted surfaces greater than 6 square feet per room or 20 square feet outside must give Clients a pamphlet called "Renovate Right" and get a signed receipt before beginning a job. Contractors can call (800) 424-5323 and ask for free copies of

"Renovate Right" and the "Small Entity Compliance Guide to Renovate Right" or both can be downloaded as PDF files from the EPA website.

The Consumer Product Safety Commission (CPSC) has defined lead-based paint as surface coatings containing lead concentrations greater than 90 ppm. All children's products, and some furniture, for adult and children, must not contain a concentration of lead greater than 0.009 percent (90 parts per million) in paint or any similar surface coatings. Household paint must also meet this requirement. In 1978, the CPSC banned the sale of lead-based paint to consumers and the use of lead-based paint in residences and public buildings.

Please note that the detection of any amount of lead in a component will trigger numerous requirements from the California Occupations Safety and Health Administration (Cal-OSHA) lead in construction standard (e.g., Title 8, CCR Section 1532.1), even with common tasks such as drywall demolition, manual paint scraping, and manual paint sanding. The employer is required to conduct air sampling to determine the exposure to lead during these tasks and during other tasks that could result in lead exposure. Until actual exposures are determined, workers are required to wear respirators that are appropriate to the task. Detailed requirements are published in the Cal-OSHA standard for lead in construction.

All workers who may be exposed to lead must be trained in the hazards of lead. The results of air sampling are used to determine if workers are exposed to lead above the action level (AL) of 30 micrograms per cubic meter of air or above the permissible exposure limit (PEL) of 50 micrograms of lead per cubic meter of air, averaged over an 8-hour shift. Exposures above the AL or PEL will trigger additional requirements including engineering controls, proper housekeeping, washing facilities for hand and face washing, additional worker training, respiratory protection, medical monitoring, and additional air sampling. The employer must have a written compliance plan.

Lead Paint

Interim controls which are temporary measures may include the following:

- Paint Film Stabilization: "scrape off the loose and flakey paint and reapply with regular house paint".
- Friction (places that rub) and Impact (places that are bumped or banged) Surface Treatments (Doors, windows, cabinets, floors, etc): treated by covering the surfaces with an abrasion-resistant material, or by repairing to an intact working condition in order to minimize dust.
- Special Cleaning: reduction of lead hazard by cleaning up visible dust by HEPA vacuuming, washing and HEPA vacuuming again.

Interim controls typically last less than 20 years and will require the reevaluation of components on a periodic basis.

As of April 22, 2010, the EPA passed the Renovator, Repair and Paint Rule (RRP) (40 CFR Part 745.90) which states all renovation and painting contractors and other trades who work in pre-1978 housing and who might disturb painted surfaces must become Lead Certified Renovators by taking a one-day course about using "Lead Safe Work Practices" on the job.

Abatement methods which eliminate or put a barrier in front of lead hazards may include the following:

- Encapsulation: covering lead paint with a special liquid or thick coating (not regular paint). Works well on surfaces that are in good condition and should not be used on friction or impact surfaces.
- Enclosure: covering lead paint with a solid, dust-tight barrier that is usually mechanically attached (sheetrock, paneling, drywall).
- Replacement: removal of lead covered components (doors, windows, molding) and replacing with lead free components.
- Removal: recommended when other options may not be feasible; removal of lead paint by means of heat guns, scraping and sanding, power tools, chemical stripping and/or use of abrasives and hydro blasting.

Abatement controls typically last more than 20 years. Abatement methods that will result in the smallest amount of dust generated are preferred. Workers who partake in the above abatement methods should be California State Certified Lead Supervisors and Workers. Clearance sampling after abatement must be conducted by a certified lead-based paint inspector

Lead Safe Work Practice Requirements for Maintenance, Renovation or Remodeling

Lead-based paint, deteriorated paint or lead-based hazards require lead safe work practices. These practices are necessary for regular lead based paint hazard controls, repair, remodeling, renovation or other work activities that may disturb lead based paint above HUD's de minimis levels. HUD describes de minimus levels as follows:

- 20 square feet on exterior surfaces
- 2 square feet in any one interior room or space
- 10% of a type of building component with a small surface area (such as painted windowsills) on interior or exterior surfaces

Workers who may disturb lead-based paint above the de minimis level during repair, renovation or maintenance activities or any other work efforts that disturbs a known or assumed lead-based paint above HUD's de minimis shall be trained in lead safe work practices.

Firms providing abatement services must be certified as an abatement firm by the EPA or the State. Workers conducting abatement must be trained and certified as abatement workers by a training provider accredited by the EPA or State.

SECTION 6 DISCLOSURE

A copy of this summary must be provided to new lessees (tenants) and purchasers of this property under Federal Law (24 CFR part 35 and 40 CFR part 745) before they become obligated under a lease or sales contract. The complete report must also be provided to new purchasers and it must be made available to new tenants. Landlords (lessors) and sellers are also required to distribute an educational pamphlet and include standard warning language in their leases or sales contracts to ensure that parents have the information they need to protect their children from lead-based paint hazards.

It is the owner's legal obligation to disclose the inspection results to tenants and/or purchasers before obligation under 24 CFR part 35 and 40 CFR part 745 (published in the Federal Register, Volume 61, Number 45, March 6, 1996, starting on P. 9064; copies of the regulations and related materials can be obtained from the National Lead Information Center Clearinghouse, (1-800-424-LEAD).

SECTION 7 Appendices

Appendix 1

XRF Data Sheet

and

Performance Characteristic Sheet (PCS)

Lead Based Paint XRF Data Sheet

Project: Vanir- Juvenile Hall-Building 6, 331 The City Drive, Orange, CA 92868

Inspection Date: March 28, 2024

(EPA Regulated Lead-Based Paint= 1.0 mg/cm²)

(County of Los Angeles= 0.7mg/cm²) (<LOD= Below Limit of Detection)

			·		Comp	onent					
Sample #	Unit	Side	Location	Test Location	Structure	Member	Paint Condition	Substrate	Color	XRF Reading (mg/cm2)	Classification (pos, neg, inc.)
1	B-6		Calibration				Intact		Red NIST	1.0	
2	B-6		Calibration				Intact		Red NIST	1.1	
3	B-6		Calibration				Intact		Red NIST	1.0	
4	B-6	A	Room 24	Door	Door		Intact	Metal	Blue	.23	Negative
5	B-6	A	Room 24	Door	Frame		Intact	Metal	Blue	.17	Negative
6	B-6	A	Room 24	Wall			Intact	Concrete	Tan	.11	Negative
7	B-6	В	Room 24	Wall			Intact	Concrete	Tan	.16	Negative
8	B-6	C	Room 24	Wall			Intact	Concrete	Tan	.21	Negative
9	B-6	D	Room 24	Wall			Intact	Concrete	Tan	.11	Negative
10	B-6	В	Room 24	Floor			Intact	Concrete	Brown	<lod< td=""><td>Negative</td></lod<>	Negative
11	B-6	В	Room 24		Base		Intact	Concrete	Brown	.12	Negative
12	B-6	D	Rm. 24 bath	Door			Intact	Metal	Blue	.02	Negative
13	B-6	D	Rm. 24 bath	Door			Intact	Metal	Blue	.02	Negative
14	B-6	D	Rm. 24 bath				Intact	Ceramic	Yellow	<lod< td=""><td>Negative</td></lod<>	Negative
15	B-6	D	Rm. 24 bath	Wall	Base	Tile	Intact	Ceramic	Yellow	9.8	Positive
16	B-6	A	Room 23	Door	Door		Intact	Metal	Blue	.11	Negative
17	B-6	A	Room 23	Door	Frame		Intact	Metal	Blue	.17	Negative
18	B-6	A	Room 23	Wall			Intact	Concrete	Tan	.12	Negative
19	B-6	C	Room 23	Wall			Intact	Concrete	Tan	.09	Negative
20	B-6	С	Room 23	Window	Frame		Intact	Metal	Blue	.02	Negative
21	B-6	В	Rm 23 bath	Door	Door		Intact	Metal	Blue	.06	Negative
22	B-6	В	Rm 23 bath	Door	Frame		Intact	Metal	Blue	.06	Negative
23	B-6	В	Rm 23 bath	Wall	Base	Tile	Intact	Ceramic	Yellow	7.8	Positive

Lead Based Paint XRF Data Sheet

Project: Vanir- Juvenile Hall-Building 6, 331 The City Drive, Orange, CA 92868

Inspection Date: March 28, 2024

(EPA Regulated Lead-Based Paint= 1.0 mg/cm²) (<LOD= Below Limit of Detection)

					Comp	onent					
Sample #	Unit	Side	Location	Test Location	Structure	Member	Paint Condition	Substrate	Color	XRF Reading (mg/cm2)	Classification (pos, neg, inc.)
24	B-6	В	Rm 23 bath				Intact	Ceramic	Yellow	<lod< td=""><td>Negative</td></lod<>	Negative
25	B-6	A	Room 22	Door	Door		Intact	Metal	Blue	.21	Negative
26	B-6	A	Room 22	Door			Intact	Metal	Blue	.20	Negative
27	B-6	A	Room 22	Wall			Intact	Concrete	Tan	.09	Negative
28	B-6	В	Room 22	Wall			Intact	Concrete	Tan	.11	Negative
29	B-6	C	Room 22	Wall			Intact	Concrete	Tan	.10	Negative
30	B-6	D	Room 22	Wall			Intact	Concrete	Tan	.10	Negative
31	B-6	В	Room 22	Floor			Intact	Concrete	Brown	<lod< td=""><td>Negative</td></lod<>	Negative
32	B-6	В	Room 22	Wall	Base		Intact	Concrete	Brown	.02	Negative
33	B-6	В	Rm. 22 bath	Wall	Base	Tile	Intact	Ceramic	Yellow	6.8	Positive
34	B-6	В	Rm. 22 bath	Floor	Tile		Intact	Ceramic	Yellow	<lod< td=""><td>Negative</td></lod<>	Negative
35	B-6	В	Rm. 22 bath	Wall			Intact	Concrete	White	.01	Negative
36	B-6	A	Room 21	Door	Door		Intact	Metal	Blue	.06	Negative
37	B-6	A	Room 21	Door	Frame		Intact	Metal	Blue	.12	Negative
38	B-6	В	Room 21	Wall			Intact	Concrete	Tan	.07	Negative
39	B-6	В	Room 21	Floor			Intact	Concrete	Brown	<lod< td=""><td>Negative</td></lod<>	Negative
40	B-6	C	Room 21	Window	Frame		Intact	Metal	Blue	.02	Negative
41	B-6	В	Rm. 21 bath	Wall	Base	Tile	Intact	Ceramic	Yellow	7.2	Positive
42	B-6	В	Exterior	Wall			Intact	Concrete	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
43	B-6	В	Exterior	Wall	Panel		Intact	Metal	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
44	B-6	A	Exterior	Wall	Overhang		Intact	Concrete	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
45	B-6	A	Exterior	Door	Door		Intact	Metal	Green	.18	Negative
46	B-6	A	Exterior	Door	Frame		Intact	Metal	Green	.07	Negative

Lead Based Paint XRF Data Sheet

Project: Vanir- Juvenile Hall-Building 6, 331 The City Drive, Orange, CA 92868

Inspection Date: March 28, 2024

(EPA Regulated Lead-Based Paint= 1.0 mg/cm²) (<LOD= Below Limit of Detection)

					Comp	onent					
Sample #	Unit	Side	Location	Test Location	Structure	Member	Paint Condition	Substrate	Color	XRF Reading (mg/cm2)	Classification (pos, neg, inc.)
47	B-6	A	Exterior	Wall C	Fire box		Intact	Metal	Red	.21	Negative
48	B-6	A	Exterior	Door 3	Door		Intact	Metal	Green	.12	Negative
49	B-6	A	Exterior	Door 3	Frame		Intact	Metal	Green	.09	Negative
50	B-6	С	Exterior	Door	Door		Intact	Metal	Green	.15	Negative
51	B-6	C	Exterior	Door	Frame		Intact	Metal	Green	.26	Negative
52	B-6	С	Exterior	Window	Frame		Intact	Metal	Green	.04	Negative
53	B-6	A	Exterior	Wall	Fascia		Intact	Metal	Grey	<lod< td=""><td>Negative</td></lod<>	Negative
54	B-6		Calibration				Intact		Red NIST	1.0	3

Performance Characteristic Sheet

EFFECTIVE DATE: September 24, 2004 EDITION NO.: 1

MANUFACTURER AND MODEL:

Make: Niton LLC
Tested Model: XLp 300
Source: 109Cd

Note: This PCS is also applicable to the equivalent model variations indicated

below, for the Lead-in-Paint K+L variable reading time mode, in the XLi and

XLp series:

XLi 300A, XLi 301A, XLi 302A and XLi 303A. XLp 300A, XLp 301A, XLp 302A and XLp 303A. XLi 700A, XLi 701A, XLi 702A and XLi 703A. XLp 700A, XLp 701A, XLp 702A, and XLp 703A.

Note: The XLi and XLp versions refer to the shape of the handle part of the instrument. The differences in the model numbers reflect other modes available, in addition to Lead-in-Paint modes. The manufacturer states that specifications for these instruments are identical for the source, detector, and detector electronics relative to the Lead-in-Paint mode.

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

Lead-in-Paint K+L variable reading time mode.

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm² (inclusive)

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm² in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm² film).

If readings are outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instruments into control before XRF testing proceeds.

SUBSTRATE CORRECTION:

For XRF results using Lead-in-Paint K+L variable reading time mode, substrate correction is <u>not</u> needed for: Brick, Concrete, Drywall, Metal, Plaster, and Wood

INCONCLUSIVE RANGE OR THRESHOLD:

K+L MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm²)
Results not corrected for substrate bias on any	Brick	1.0
substrate	Concrete	1.0
	Drywall	1.0
	Metal	1.0
	Plaster	1.0
	Wood	1.0

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* ("HUD Guidelines"). Performance parameters shown on this sheet are calculated from the EPA/HUD evaluation using archived building components. Testing was conducted in August 2004 on 133 testing combinations. The instruments that were used to perform the testing had new sources; one instrument's was installed in November 2003 with 40 mCi initial strength, and the other's was installed June 2004 with 40 mCi initial strength.

OPERATING PARAMETERS:

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

SUBSTRATE CORRECTION VALUE COMPUTATION:

Substrate correction is not needed for brick, concrete, drywall, metal, plaster or wood when using Lead-in-Paint K+L variable reading time mode, the normal operating mode for these instruments. If substrate correction is desired, refer to Chapter 7 of the HUD Guidelines for guidance on correcting XRF results for substrate bias.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing. Use the K+L variable time mode readings.

Conduct XRF retesting at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below.

Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family housing a result is defined as the average of three readings. In multifamily housing, a result is a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF results.

Compute the average of all ten re-test XRF results.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

TESTING TIMES:

For the Lead-in-Paint K+L variable reading time mode, the instrument continues to read until it is moved away from the testing surface, terminated by the user, or the instrument software indicates the reading is complete. The following table provides testing time information for this testing mode. The times have been adjusted for source decay, normalized to the initial source strengths as noted above. Source strength and type of substrate will affect actual testing times. At the time of testing, the instruments had source strengths of 26.6 and 36.6 mCi.

Testing Times Using K+L Reading Mode (Seconds)										
		All Data		Median for laboratory-measured lead levels (mg/cm²)						
Substrate	25 th Percentile	Median	75 th Percentile	Pb < 0.25	0.25 <u><</u> Pb<1.0	1.0 <u><</u> Pb				
Wood Drywall	4	11	19	11	15	11				
Metal	4	12	18	9	12	14				
Brick Concrete Plaster	8	16	22	15	18	16				

CLASSIFICATION RESULTS:

XRF results are classified as positive if they are greater than or equal to the threshold, and negative if they are less than the threshold.

DOCUMENTATION:

A document titled *Methodology for XRF Performance Characteristic Sheets* provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. For a copy of this document call the National Lead Information Center Clearinghouse at 1-800-424-LEAD.

This XRF Performance Characteristic Sheet was developed by the Midwest Research Institute (MRI) and QuanTech, Inc., under a contract between MRI and the XRF manufacturer. HUD has determined that the information provided here is acceptable when used as guidance in conjunction with Chapter 7, Lead-Based Paint Inspection, of HUD's *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*.

APPENDIX 2 SITE DRAWING

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Positive components greater than 1.0 mg/cm2

(Sample #'s 15, 23, 33, 44: Yellow Ceramic Wall Tile Base

Appendix 3

Glossary





Glossary

AALA: American Association for Laboratory Accreditation. Also known as A2LA.

Abatement: A measure or set of measures designed to permanently eliminate lead-based paint hazards or lead-based paint. Abatement strategies include the removal of lead-based paint, enclosure, encapsulation, replacement of building components coated with lead-based paint, removal of lead-contaminated dust, and removal of lead-contaminated soil or overlaying of soil with a durable covering such as asphalt (grass and sod are considered interim control measures). All of these strategies require preparation; cleanup; waste disposal; postabatement clearance testing; recordkeeping; and, if applicable, monitoring. See also Complete abatement and Interim controls.

Abrasion resistance: Resistance of the paint to wear by rubbing or friction; related to both toughness and gloss.

Accessible surface: Any protruding interior or exterior surface, such as an interior window sill, that a young child can mouth or chew.

Accreditation: A formal recognition that an organization, such as a laboratory, is competent to carry out specific tasks or types of tests.

Accredited laboratory: A laboratory that has been evaluated and approved by the National Lead Laboratory Accreditation Program (NLLAP), to perform lead measurement or analysis, usually over a specified period of time.

Accredited training provider: A training provider who meets the standards established by EPA for the training of risk assessors, inspectors, lead-based paint hazard control contractors, and workers.

Accuracy: The degree of agreement between an observed value and an accepted reference value (a "true" value); a data quality indicator. Accuracy includes a combination of random errors (precision) and systematic errors (bias) due to sampling and analysis.

Acrylic: A synthetic resin used in highperformance waterborne coatings; a coating whose binder contains acrylic resins.

Adhesion: The ability of dry paint or other coating to attach to a surface and remain fixed on it without blistering, flaking, cracking, or being susceptible to removal by tape.

Administrative removal: The temporary removal of workers from the job to prevent the concentration of lead in their blood from reaching levels requiring medical removal.

AIHA: American Industrial Hygiene Association.

ALC: See Apparent Lead Concentration.

Aliquot: See Subsample.

Alkali: A chemical, such as lye, soda, lime, etc., that will neutralize an acid. Oil paint films can be destroyed by alkalies. Some paint removal products contain alkaline substances.

Alkyd: Synthetic resin modified with oil; coating that contains alkyd resins in the binder.

Apparent Lead Concentration (ALC): The x-ray fluorescence (XRF) reading or average of more than one reading on a *painted* surface. See also XRF analyzer, Substrate Equivalent Lead (SEL), and Corrected Lead Concentration (CLC).

Bare soil: Soil not covered with grass, sod, some other similar vegetation, or paving, including the sand in sandboxes.





Bias: A systematic error in the measurement process. For XRF readings, one source of bias is the substrate effect. See also Substrate effect and XRF analyzer.

Biennial report (for hazardous waste): A report (EPA Form 8700–13A) submitted by generators of hazardous waste to the EPA Regional Administrator. The report is due on March 1 of even-numbered years. The report includes information on the generator's activities during the previous calendar year. The owners and operators of treatment, storage, and disposal facilities must also prepare and submit biennial reports using EPA Form 8700–1313.

Binder: Solid ingredients in a coating that hold the pigment particles in suspension and bind them to the substrate. Binders used in paints and coatings include oil, alkyd, acrylic, latex, and epoxy. The nature and amount of binder determines many of the coating's performance properties—washability, toughness, adhesion, gloss, etc. See also Pigment.

Biological monitoring: The analysis of blood, urine, or both to determine the level of lead contamination in the body. Blood lead levels are expressed in micrograms of lead per deciliter (one-tenth of a liter) of blood, or $\mu g/dL$. They are also expressed in micromoles per liter ($\mu mol/L$).

Blank: A nonexposed sample of the medium being used for testing (i.e., wipe or filter) that is analyzed to determine if the medium has been contaminated with lead (e.g., at the factory or during transport).

Blind sample: A subsample submitted for analysis with a composition and identity known to the submitter but not to the analyst; used to test the analyst's or laboratory's proficiency in conducting measurements. See also Spiked sample.

Blood lead threshold: Any blood lead level greater than or equal to 10 μ g/dL as defined by the Centers for Disease Control and Prevention. See also Elevated Blood Lead level (EBL) child.

Building component: Any element of a building that may be painted or have dust on its surface, e.g. walls, stair treads, floors, railings, doors, window sills, etc.

Building component replacement: See Replacement.

Cementitious material: A material that is mixed with water, either with or without aggregate, to provide the plasticity, cohesion, and adhesion necessary for the placement and formation of a rigid mass (ASTM Standard C 11).

Centimeter: See cm.

Certification: The process of testing and evaluating against certain specifications the competence of a person, organization, or other entity in performing a function or service, usually for a specified period of time.

Certified: The designation for contractors who have completed training and other requirements to allow them to safely undertake risk assessments, inspections, or abatement work. Risk assessors, inspectors, and abatement contractors should be certified by the appropriate local, State or Federal agency.

Certified Industrial Hygienist (CIH): A person who has passed the 2-day certification exam of the American Board of Industrial Hygiene, and who has at least 4 years of experience in industrial hygiene and a graduate degree or a total of 5 years of experience. See also Industrial hygienist.

Certified reference material (CRM): Reference material that has at least one of its property values established by a technically valid procedure and is accompanied by or traceable to a certificate or other documentation issued by a certifying body. See also Standard reference material.

CFR: See Code of Federal Regulations.

Chalking: The photo-oxidation of paint binders—usually due to weathering—that causes a powder to form on the film surface.





Characteristics (of hazardous waste): EPA has identified four characteristics of hazardous waste: ignitability, corrosivity, reactivity, and toxicity (as determined by the TCLP test). Any solid waste that exhibits at least one of these characteristics may be classified as hazardous under the Resource Conservation and Recovery Act (RCRA), depending on how the waste is produced and what quantities are generated. See also Toxicity Characteristic Leaching Procedure (TCLP).

Chewable surface: See Chewed surface and Accessible surface.

Chewed surface: Any painted surface that shows evidence of having been chewed or mouthed by a young child. A chewed surface is usually a protruding, horizontal part of a building, such as an interior window sill. See also Accessible surface.

CLC: See Corrected Lead Concentration (CLC).

Cleaning: The process of using a HEPA vacuum and wet cleaning agents to remove leaded dust; the process includes the removal of bulk debris from the work area. OSHA prohibits the use of compressed air to clean lead-contaminated dust from a surface.

Clearance examination: Visual examination and collection of environmental samples by an inspector or risk assessor and analysis by an accredited laboratory upon completion of an abatement project, interim control intervention, or maintenance job that disturbs lead-based paint (or paint suspected of being lead-based). The clearance examination is performed to ensure that lead exposure levels do not exceed standards established by the EPA Administrator pursuant to Title IV of the Toxic Substances Control Act, and that any cleaning following such work adequately meets those standards.

Clearance examiner: A person who conducts clearance examinations following lead-based paint hazard control and cleanup work, usually a certified risk assessor or a certified inspector.

cm: Centimeter; 1/100 of a meter.

Code of Federal Regulations (CFR): The codification of the regulations of Federal agencies. The regulations are published in the Federal Register. See also Federal Register (FR).

Cohesion: Ability of a substance to adhere to itself; internal adhesion; the force holding a substance together.

Common area: A room or area that is accessible to all residents in a community (e.g., hallways or lobbies); in general, any area not kept locked.

Competent person: As defined in the OSHA Lead Construction Standard (29 CFR 1926.62), a person who is capable of identifying or predicting hazardous working conditions and work areas, and who has authorization to take prompt, corrective measures to eliminate the hazards. A competent person is not necessarily a risk assessor, inspector, or abatement project supervisor.

Complete abatement: Abatement of all lead-based paint inside and outside a dwelling or building and reduction of any lead-contaminated dust or soil hazards. All of these strategies require preparation; cleanup; waste disposal; postabatement clearance testing; recordkeeping; and, if applicable, reevaluation and on-going monitoring. See also Abatement.

Compliance plan: A document that describes the types of tasks, workers, protective measures, and tools and other materials that may be employed in lead-based paint hazard control to comply with the OSHA Lead Exposure in Construction standard.

Composite sample: A single sample made up of individual subsamples. Analysis of a composite sample produces the arithmetic mean of all subsamples.

Containment: A process to protect workers and the environment by controlling exposures to the lead-contaminated dust and debris created during abatement. See Worksite preparation level.





Contingency plan: A document that describes an organized, planned, and coordinated course of action to be taken during any event that threatens human health or the environment, such as a fire, explosion, or the release of hazardous waste or its constituents from a treatment, storage, or disposal facility.

Corrected Lead Concentration (CLC): The absolute difference between the Apparent Lead Concentration and the Substrate Equivalent Lead. See also Apparent Lead Concentration (ALC) and Substrate Equivalent Lead (SEL).

Detection limit: The minimum amount of a substance that can be reliably measured by a particular method.

Deteriorated lead-based paint: Any lead-based paint coating on a damaged or deteriorated surface or fixture, or any interior or exterior lead-based paint that is peeling, chipping, blistering, flaking, worn, chalking, alligatoring, cracking, or otherwise becoming separated from the substrate.

Digestion blank: A mixture of the reagents used for digesting of paint, soil, or dust matrixes but without the matrix. The blank undergoes all the steps of the analysis, starting with digestion. The blank is used to evaluate the contamination process from a laboratory.

Direct-reading XRF: An analyzer that provides the operator with a display of lead concentrations calculated from the lead K x ray intensity without a graphic of the spectrum usually in mg/cm² (milligrams of lead per square centimeter of painted surface area). See also XRF analyzer.

Disposal (of hazardous waste): The discharge, deposit, injection, dumping, spilling, leaking, or placement of solid or hazardous waste on land or in water so that none of its constituents can pollute the environment by being emitted into the air or discharged into a body of water, including groundwater.

Disposal facility: A facility or part of one in which hazardous waste is placed on land or in water to remain there after the facility closes.

Door mat: See Walk-off mat.

Dust removal: A form of interim control that involves initial cleaning followed by periodic monitoring and recleaning, as needed. Depending on the severity of lead-based paint hazards, dust removal may be the primary activity or just one element of a broader control effort.

Dust trap: A surface, component, or furnishing that serves as a reservoir where dust can accumulate.

EBL child: See Elevated Blood Lead level (EBL) child.

Efflorescence: The salt rising to the surface of a material, such as masonry, plaster, or cement, caused by the movement of water through the material. Paint or encapsulants may not adhere to a surface contaminated with efflorescence.

Elastomeric: A group of pliable, elastic liquid encapsulant coatings. An elastomer is a macromolecular material which, at room temperature, is capable of substantially recovering its size and shape after the force causing its deformation is removed (see ASTM D 907, D-14).

Elevated Blood Lead level (EBL) child: A child who has a blood lead level greater than or equal to 20 μg/dL or a persistent 15 μg/dL. See also Blood lead threshold.

Encapsulation: Any covering or coating that acts as a barrier between lead-based paint and the environment, the durability of which relies on adhesion and the integrity of the existing bonds between multiple layers of paint and between the paint and the substrate. See also Enclosure.

Enclosure: The use of rigid, durable construction materials that are mechanically fastened to the substrate to act as a barrier between the lead-based paint and the environment.





Engineering controls: Measures other than respiratory protection or administrative controls that are implemented at the work site to contain, control, and/or otherwise reduce exposure to lead-contaminated dust and debris usually in the occupational health setting. The measures include process and product substitution, isolation, and ventilation.

Epoxy paint: Paint based on an epoxy resin. An epoxy resin is a cross-linking resin the reactivity of which depends on the epoxide group.

Evaluation: Risk assessment, paint inspection, reevaluation, investigation, clearance examination, or risk assessment screen.

Examination: See Clearance examination.

Examiner: A person certified to conduct clearance examinations or reevaluations, usually a certified inspector or certified risk assessor.

Exposure monitoring: The sampling and analysis of air both inside and outside the work area to determine the degree of worker and resident exposure to lead or other airborne contaminants, often involving air sampling inside a worker's breathing zone.

Exterior work area: For lead hazard control work, the exterior work area includes any exterior building components, such as a porch or stairway; the safety perimeter; and access barriers.

Facility (pertaining to hazardous waste): All buildings, contiguous land, structures, and other appurtenances, as well as any improvements, where lead-based paint or hazardous waste is treated, stored, or disposed. A facility may consist of several different treatment, storage, or disposal units, such as landfills and surface impoundments.

Federal Register (FR): A daily Federal publication that contains proposed and final regulations, rules, and notices.

Fibermat: A semirigid woven material attached with a liquid adhesive to a surface or substrate.

Field blank: A clean sample of the matrix (e.g., filter, or wipe) that has been exposed to the sampling conditions; returned to the laboratory; and analyzed as an environmental sample. Clean quartz sand, air sampling filters and cassettes, and clean wipes can be used as field blanks. The field blank, which should be treated just like the sample, indicates possible sources of contamination.

FR: See Federal Register (FR).

Friction surface: Any interior or exterior surface, such as a window or stair tread, subject to abrasion or friction.

Generator: Any person whose act or operation produces hazardous waste identified or listed in 40 CFR Part 261 or whose act causes a hazardous waste to come under regulation (40 CFR 260.10).

Generator identification number: The unique number assigned by EPA to each generator; transporter of hazardous waste; and treatment, storage, or disposal facility.

Hazardous waste: As defined in EPA regulations (40 CFR 261.3), hazardous waste is solid waste or a combination of solid wastes that because of its quantity; concentration; or physical, chemical, or infectious characteristics may cause or significantly contribute to increases in mortality, serious and irreversible or incapacitating but reversible illnesses, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed. As defined in the regulations, solid waste is hazardous if it meets one of four conditions: (1) exhibits a characteristic of hazardous waste (40 CFR Sections 261.20 through 262.24); (2) has been listed as hazardous (40 CFR Section 261.31 through 261.33); (3) is a mixture containing a listed hazardous waste combined with a nonhazardous solid waste, unless the mixture is specifically excluded or no longer exhibits any of the characteristics of hazardous waste; and (4) is not excluded from regulation as hazardous waste. For lead-based paint abatement





waste, hazardous waste is waste that contains more than 5 ppm of leachable lead as determined by the TCLP test, or is waste that is corrosive, ignitable, or reactive and not otherwise excluded.

Hazardous Waste Manifest: See Manifest.

Heat gun: A device capable of heating leadbased paint causing it to separate from the substrate. For lead hazard control work, the heat stream leaving the gun should not exceed 1,100 °F (some authorities may use a different temperature).

HEPA filter: See High-Efficiency Particulate Air (HEPA) filter.

HEPA/wet wash/HEPA cycle: The cleaning cycle that begins with HEPA vacuuming, followed by a wet wash with a lead-specific cleaning agent, such as trisodium phosphate detergent or another liquid cleaning agent, followed by a final pass with a HEPA vacuum over the surface.

High-Efficiency Particulate Air (HEPA) filter: A filter capable of removing particles of 0.3 microns or larger from air at 99.97 percent or greater efficiency.

High phosphate detergent: See Trisodium phosphate (TSP) detergent.

Impact surface: An interior or exterior surface (such as surfaces on doors) subject to damage by repeated impact or contact.

Incinerator: An enclosed device using controlled flame combustion that neither meets the criteria for classification as a boiler nor is listed as an industrial furnace.

Industrial hygienist: A person having a college or university degree in engineering, chemistry, physics, medicine, or a related physical or biological science who, by virtue of special training, is qualified to anticipate, recognize, evaluate, and control environmental and occupational health hazards and the impact of those hazards on the community and workers.

In-place management: See Interim controls.

Inspection (of paint): A surface-by-surface investigation to determine the presence of lead-based paint (in some cases including dust and soil sampling) and a report of the results.

Inspector: An individual who has completed training from an accredited program and been licensed or certified by the appropriate State or local agency to (1) perform inspections to determine and report the presence of lead-based paint on a surface-by-surface basis through onsite testing, (2) report the findings of such an inspection, (3) collect environmental samples for laboratory analysis, (4) perform clearance testing, and (5) document successful compliance with lead-based paint hazard control requirements or standards.

Interim controls: A set of measures designed to temporarily reduce human exposure or possible exposure to lead-based paint hazards. Such measures include specialized cleaning, repairs, maintenance, painting, temporary containment, and management and resident education programs. Monitoring, conducted by owners, and reevaluations, conducted by professionals, are integral elements of interim control. Interim controls include dust removal; paint film stabilization; treatment of friction and impact surfaces; installation of soil coverings, such as grass or sod; and land-use controls. See also Monitoring, Reevaluation, and Abatement.

Interior window sill: The portion of the horizontal window ledge that protrudes into the interior of the room, adjacent to the window sash when the window is closed; often called the window stool.

Investigation (pertaining to EBL case): The process of determining the source of lead exposure for a child or other resident with an elevated blood lead level. Investigation consists of administration of a questionnaire, comprehensive environmental sampling, case management, and other measures.





Investigator: A person who conducts an investigation of a dwelling where a resident has an elevated blood lead level. The investigator must be proficient in interviewing techniques, environmental sampling, and the interpretation of risk assessment and environmental sampling data.

Laboratory analysis: A determination of the lead content by atomic absorption spectroscopy, inductively coupled plasma emission spectroscopy, or laboratory-based K or L x-ray fluorescence, or an equivalent method.

Landfill: A State-licensed or State-permitted disposal facility that meets municipal solid waste standards (see Federal regulations at 40 CFR 258).

Landfill liner: A continuous layer of natural or synthetic materials placed beneath and sometimes around a surface impoundment, landfill, or landfill cell. The layer restricts the downward or lateral escape of hazardous waste, hazardous waste constituents, or leachate (40 CFR Part 258).

Latex: A waterborne emulsion paint made with synthetic binders, such as 100-percent acrylic, vinyl acrylic, terpolymer, or styrene acrylic; a stable emulsion of polymers and pigment in water.

Lead: Lead includes metallic lead and inorganic and organic compounds of lead.

Lead-based paint: Any paint, varnish, shellac, or other coating that contains lead equal to or greater than 1.0 mg/cm² as measured by XRF or laboratory analysis, or 0.5 percent by weight $(5,000~\mu\text{g/g},\,5,000~\text{ppm},\,\text{or}\,5,000~\text{mg/kg})$ as measured by laboratory analysis. (Local definitions may vary.)

Lead-based paint hazard: A condition in which exposure to lead from lead-contaminated dust, lead-contaminated soil, or deteriorated lead-based paint would have an adverse effect on human health (as established by the EPA Administrator under Title IV of the Toxic Substances Control Act). Lead-based paint hazards

include for example, deteriorated lead-based paint, leaded dust levels above applicable standards, and bare leaded soil above applicable standards.

Lead-based paint hazard control: Activities to control and eliminate lead-based paint hazards, including interim controls, abatement, and complete abatement.

Lead-based paint abatement planner/designer: An individual who has completed an accredited training program on planning and designing lead-based paint abatement projects.

Lead-based paint abatement worker: See Worker.

Lead carbonate: A pigment used in some leadbased paints as a hiding agent; also known as white lead.

Lead-contaminated dust: Surface dust in residences that contains an area or mass concentration of lead in excess of the standard established by the EPA Administrator, pursuant to Title IV of the Toxic Substances Control Act. Until the EPA standards are set, the HUD-recommended clearance and risk assessment standards for leaded dust are 100 $\mu g/ft^2$ on floors, 500 $\mu g/ft^2$ on interior window sills, and 800 $\mu g/ft^2$ on window troughs. The recommended standard for lead hazard screens for floors is 50 $\mu g/ft^2$ and for window troughs is 400 $\mu g/ft^2$.

Lead-contaminated soil: Bare soil on residential property that contains lead in excess of the standard established by the EPA Administrator, pursuant to Title IV of the Toxic Substances Control Act. The HUD-recommended standard and interim EPA guidance is 400 $\mu g/g$ for high-contact play areas and 2,000 $\mu g/g$ in other bare areas of the yard. Soil contaminated with lead at levels greater than or equal to 5,000 $\mu g/g$ should be abated by removal or paving.

Lead-free dwelling: A lead-free dwelling contains no lead-based paint and has interior dust and exterior soil lead levels below the applicable HUD and EPA standards.





Lead hazard screen: A means of determining whether residences in good condition should have a full risk assessment. Also called a risk assessment screen.

Lead-poisoned child: A child with a single blood lead level that is greater than or equal to 20 μ g/dL or consecutive blood lead levels greater than or equal to 15 μ g/dL. Local definitions may vary.

Lead-specific detergent: A cleaning agent manufactured specifically for cleaning and removing leaded dust or other lead contamination.

Leaded dust: See Lead-contaminated dust.

Leaded zinc: A paint primer made from zinc oxide and lead sulfates.

Licensed: Holding a valid license or certification issued by EPA or by an EPA-approved State program pursuant to Title IV of the Toxic Substances Control Act. The license is based on certification for lead-based paint hazard control work. See also Certified.

Listed waste: A hazardous waste that has been placed on one of three lists developed by EPA: nonspecific source wastes, specific source wastes, and commercial chemical products. The lists were developed by examining different types of waste and chemical products to determine if they exhibited one of the four characteristics of hazardous waste (toxicity, corrosivity, ignitability, or reactivity), met the statutory definition of hazardous waste, were acutely toxic or acutely hazardous, or were otherwise toxic.

Maintenance: Work intended to maintain adequate living conditions in a dwelling, which has the potential to disturb lead-based paint or paint that is suspected of being lead-based.

Manifest: The shipping document (EPA Form 8700–22 or a comparable form required by the State or locality) used for identifying the quantity, composition, origin, routing, and destination of hazardous waste during its transport

from the point of generation to the point of treatment, storage, or disposal. Also, a shipping document used to keep track of items being transported. All hazardous waste must be accompanied by a manifest. See Hazardous waste.

Mat: See Walk-off mat.

Matrix blank: A sample of the matrix (paint chips, soil, or dust) that does not contain the analyte lead. This sample goes through the complete analysis, including digestion.

MDL: See Method detection limit (MDL).

Mean: The arithmetic average of a series of numerical data values; for example, the algebraic sum of the data values divided by the number of data values.

Medical removal: The temporary removal of workers from the job because of the occurrence of elevated blood lead levels as defined in the OSHA Lead Exposure in Construction standard (29 CFR 1926.62).

Method blank: See Digestion blank.

Method detection limit (MDL): The minimum concentration of an analyte that, for a given matrix and method, has a 99-percent probability of being identified, qualitatively or quantitatively measured, and reported to be greater than zero.

mg: Milligram; 1/1,000 of a gram.

Microgram: See µg.

Mil: 1/1,000 of an inch; used to measure thickness.

Milligram: See mg.

Monitoring: Surveillance to determine (1) that known or suspected lead-based paint is not deteriorating, (2) that lead-based paint hazard controls, such as paint stabilization, enclosure, or encapsulation have not failed, (3) that structural problems do not threaten the integrity of hazard controls or of known or suspected





lead-based paint, and (4) that dust lead levels have not risen above applicable standards. There are two types of monitoring activities; visual surveys by property owners and reevaluations by certified risk assessors. Visual surveys are generally conducted annually for the purpose of making the first three determinations listed above. Reevaluations are conducted in accordance with the Standard Reevaluation Schedule (or more frequently, if needed) for the purpose of making all four determinations. Monitoring is not required in properties known to be free of lead-based paint. See also Reevaluation and Standard reevaluation schedule.

Monofil: A State-approved landfill that accepts only construction debris.

Mouthable surface: See Chewed surface.

Multifamily housing: Housing that contains more than one dwelling unit per location.

NLLAP requirements: Requirements, specified by the EPA National Lead Laboratory Accreditation Program (NLLAP), for accreditation for the lead analysis of paint, soil, and dust matrixes by an EPA-recognized laboratory accreditation organization.

Offsite paint removal: The process of removing a component from a building and stripping the paint from the component at an offsite paint-stripping facility.

Ongoing monitoring: See Monitoring.

Owner: A person, firm, corporation, guardian, conservator, receiver, trustee, executor, government agency or entity, or other judicial officer who, alone or with others, owns, holds, or controls the freehold or leasehold title or part of the title to property, with or without actually possessing it. This definition includes a vendee who possesses the title, but does not include a mortgagee or an owner of a reversionary interest under a ground rent lease.

Oxidation: A chemical reaction that occurs upon exposure to oxygen. Some coatings cure by oxidation; oxygen enters the liquid coating and crosslinks (attaches) the resin molecules. This film-forming method is also called "air cure" or "air dry." Oxidation also causes rust to form on metals and paint to chalk.

Paint film stabilization: The process of wet scraping, priming, and repainting surfaces coated with deteriorated lead-based paint; paint film stabilization includes cleanup and clearance.

Paint removal: An abatement strategy that entails the removal of lead-based paint from surfaces. For lead hazard control work, this can mean using chemicals, heat guns below 1,100 °F, and certain *contained* abrasive methods. Open flame burning, open abrasive blasting, sandblasting, water blasting, and extensive dry scraping are prohibited paint removal methods. (Methylene chloride paint removers and dry scraping are also not recommended.)

Patch test: A test method or procedure to assess the adhesion of an encapsulant coating to a substrate covered with a layer or layers of lead-based paint.

Personal breathing zone samples: Air samples collected from the breathing zone of a worker (within a 1-foot radius of the worker's mouth) but outside the respirator. The samples are collected with a personal sampling pump operating at 2 liters per minute, drawing air through a 37 mm mixed cellulose ester filter housed in a closed-face cassette with a pore size of 0.8 microns. See Exposure monitoring.

Personal Protective Equipment (PPE): Equipment for protecting the eyes, face, head, and/or extremities; includes protective clothing, respiratory devices, and protective shields; used when hazards capable of causing bodily injury or impairment are encountered.





PHA: See Public Housing Agency (PHA).

Pigment: Insoluble, finely ground materials that give paint its properties of color and hide.

Pigment Volume Concentration (PVC): Pigment volume as a percentage of the total non-volatile ingredients.

Pilot project: In multifamily housing, the testing of a lead-based paint hazard control strategy on a limited number of dwellings, usually those that are vacant, to determine the feasibility of carrying out such a strategy in the entire multifamily housing development; usually involves paint testing, air sampling, wipe sampling, worksite preparation, and a variety of lead-based paint hazard control treatments.

Plastic: See Polyethylene plastic.

Polyethylene plastic: All references to polyethylene plastic refer to 6-mil plastic sheeting or polyethylene bags (or doubled bags if using 4-mil polyethylene bags), or any other thick plastic material shown to demonstrate at least equivalent performance. Plastic used to contain waste should be capable of completely containing the waste and, after being properly sealed, should remain leak-tight with no visible signs of discharge during movement or relocation.

Polyurethane: An exceptionally hard and wear-resistant coating created by the reaction of polyols with a multifunctional isocyanate; often used to seal wood floors following lead-based paint hazard control work and cleaning.

Precision: The degree to which a set of observations or measurements of the same property, usually obtained under similar conditions, conform to themselves; a data quality indicator. Precision is usually expressed in either absolute or relative terms as standard deviation, variance, or range. Often known as "reproducibility."

Primary prevention: The process of controlling lead hazards to prevent exposure *before* a child is poisoned. See Secondary prevention and Tertiary prevention.

Primary standard: A substance or device with a property or value that is unquestionably accepted, within specified limits, in establishing the value of the same or related property of another substance or device.

Public Housing Agency (PHA): Any State, county, municipality, or other government entity or public body, or agency or instrumentality thereof, authorized to engage or assist in the development or operation of housing for low-income families.

PVC: See Pigment Volume Concentration (PVC).

Quality Assurance (QA): An integrated system of activities involving planning, quality control, quality assessment, reporting, and quality improvement to ensure that a product or service meets defined standards of quality within a stated level of confidence.

Quality Control (QC): The overall system of technical activities whose purpose is to measure and control the quality of a product or service so that it meets the needs of users. The aim is to provide a level of quality that is satisfactory, adequate, dependable, and economical.

Random sample: A sample drawn from a population in a way that allows each member of the population to have an equal chance of being selected. Random sampling is a process used to identify locations for the lead-based paint inspections in multifamily dwellings. See also Targeted sample and Worst-case sample.

RCRA: See Resource Conservation and Recovery Act (RCRA).

Reevaluation: In lead hazard control work, the combination of a visual assessment and collection of environmental samples performed by a certified risk assessor to determine if a previously implemented lead-based paint hazard control measure is still effective and if the dwelling remains lead-safe.





Reference material: A material or substance that has at least one sufficiently well established property that can be used to calibrate an apparatus, assess a measurement method, or assign values to materials.

Reinspection: See Reevaluation.

Removal: See Paint removal.

Renovation: Work that involves construction and/or home or building improvement measures such as window replacement, weatherization, remodeling, and repainting.

Replacement: A strategy of abatement that entails the removal of building components coated with lead-based paint (such as windows, doors, and trim) and the installation of new components free of lead-based paint.

Representative sample: A sample of a universe or whole (e.g., waste sample pile, lagoon, groundwater, or waste stream) that can be expected to exhibit the average properties of the entire universe or whole.

Resident: A person who lives in a dwelling.

Resource Conservation and Recovery Act (RCRA): The primary Federal statute governing waste management from generation to disposal. RCRA defines the criteria for hazardous and nonhazardous waste.

Risk assessment: An onsite investigation of a residential dwelling to discover any lead-based paint hazards. Risk assessments include an investigation of the age, history, management, and maintenance of the dwelling, and the number of children under age 6 and women of childbearing age who are residents; a visual assessment; limited environmental sampling (i.e., collection of dust wipe samples, soil samples, and deteriorated paint samples); and preparation of a report identifying acceptable abatement and interim control strategies based on specific conditions.

Risk assessment screen: A type of risk assessment performed only in buildings in good condition using fewer samples but more stringent evaluation criteria (standards) to determine lead hazards.

Risk assessor: A certified individual who has completed training with an accredited training program and who has been certified to (1) perform risk assessments, (2) identify acceptable abatement and interim control strategies for reducing identified lead-based paint hazards, (3) perform clearance testing and reevaluations, and (4) document the successful completion of lead-based paint hazard control activities.

Sample site: A specific spot on a surface being tested for lead concentration.

Saponification: The chemical reaction between alkalies and oil that produces a type of soap. Because of saponification, oil and alkyd coatings will not adhere to masonry substrates, galvanized metals, or zinc-rich primers. Also a form of incompatibility between types of coatings.

Screen: See Risk assessment screen or Lead hazard screen.

Screening: The process of testing children to determine if they have elevated blood lead levels.

Secondary prevention: The process of identifying children who have elevated blood lead levels through screening and controlling or eliminating the sources of further exposure. See also Primary prevention and Tertiary prevention.

SEL: See Substrate Equivalent Lead (SEL).

Site: The land or body of water where a facility is located or an activity is conducted. The site includes adjacent land used in connection with the facility or activity.





Small-quantity generator: Owners, contractors (generators), or both who produce less than 100 kg of hazardous waste per month and accumulate less than 100 kg of hazardous waste at any one time, or who produce less than 1 kg of acutely hazardous waste per month and accumulate less than 1 kg of acutely hazardous waste at any one time.

Soil: See Bare soil.

Solid waste: As defined by RCRA, the term solid waste means garbage; refuse; sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility; or other discarded materials, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations or from community activities. The term does not include solid or dissolved material in domestic sewage or solid or dissolved material in irrigation return flows or industrial discharges (which are point sources subject to permits under the Clean Water Act), nor does the term include special nuclear or byproduct material as defined by the Atomic Energy Act of 1954.

Spectrum analyzer: A type of XRF analyzer that provides the operator with a plot of the energy and intensity, or counts of both K and L x-ray spectra, as well as a calculated lead concentration. See also XRF analyzer.

Spiked matrix: See Spiked sample.

Spiked sample: A sample prepared by adding a known mass of the target analyte (e.g., leaded dust) to a specific amount of matrix sample (e.g., one dust wipe) for which an independent estimate of the target analyte concentration is available. Spiked samples are used to determine, for example, the effect of the matrix on a method's recovery efficiency. See also Blind sample.

Spot-prime: To apply a paint primer to localized areas of exposed substrate.

Standard deviation: A measure of the precision of a reading; the spread of the deviation from the mean. The smaller the standard deviation, the more precise the analysis. The standard deviation is calculated by first obtaining the mean, or the arithmetic average, of all of the readings. A formula is then used to calculate how much the individual values vary from the mean—the standard deviation is the square root of the arithmetic average of the squares of the deviation from the mean. Many hand calculators have an automatic standard deviation function. See also Mean.

Standard reevaluation schedule (SRS): A schedule that determines the frequency that reevaluations should be performed on a property.

Standard reference material (SRM): A certified reference material produced by the National Institute of Standards and Technology (U.S. Department of Commerce) and characterized for absolute content independent of analytical method. See also Certified reference material.

Subsample: A representative portion of a sample. A subsample may be either a field sample or a laboratory sample. A subsample is often combined with other subsamples to produce a composite sample. See also Composite sample.

Substrate: A surface on which paint, varnish, or other coating has been applied or may be applied. Examples of substrates include wood, plaster, metal, and drywall.

Substrate effect: The radiation returned to an XRF analyzer by the paint, substrate, or underlying material, in addition to the radiation returned by any lead present. This radiation, when counted as lead x-rays by an XRF analyzer contributes to substrate equivalent lead (bias). The inspector may have to compensate for this effect when using XRF analyzers. See also XRF analyzer.





Substrate Equivalent Lead (SEL): The XRF measurement taken on an unpainted surface; used to calculate the corrected lead concentration on a surface by using the following formula: Apparent Lead Concentration—Substrate Equivalent Lead = Corrected Lead Concentration. See also Apparent Lead Concentration (ALC), Corrected Lead Concentration (CLC), and XRF analyzer.

Target housing: Any residential unit constructed before 1978, except dwellings that do not contain bedrooms or dwellings that were developed specifically for the elderly or persons with disabilities—unless a child younger than 6 resides or is expected to reside in the dwelling. In the case of jurisdictions that banned the sale or use of lead-based paint before 1978, the Secretary of HUD may designate an earlier date for defining target housing.

Targeted sample: A sample of dwelling units selected from an apartment building or housing development using information supplied by the owner. The units selected are likely to have the greatest probability of containing lead-based paint hazards. A targeted sample is usually selected for performing risk assessments in multifamily housing when it is not possible to select a worst-case sample. See also Worst-case sample and Random sample.

TCLP: See Toxicity Characteristic Leaching Procedure (TCLP).

Tertiary prevention: Providing medical treatment to children with elevated blood lead levels to prevent more serious injury or death.

Testing combination: A unique surface to be tested that is characterized by the room equivalent, component, substrate, and visible color.

Test location: A specific area on a testing combination where XRF instruments will test for lead-based paint.

Toxicity Characteristic Leaching Procedure (TCLP): A laboratory test to determine if excessive levels of lead or other hazardous materials could leach from a sample into groundwater; usually used to determine if waste is hazardous based on its toxicity characteristics.

Trained: Successful completion of a training course in a particular discipline. For lead hazard control work, the training course must be accredited by EPA or by an EPA-approved State program, pursuant to Title IV of the Toxic Substances Control Act.

Transporter: A person who transports hazardous waste, requiring a manifest under 40 CFR Part 260.10, within the United States by air, rail, highway, or water.

Treatment: In residential lead-based paint hazard control work, any method designed to control lead-based paint hazards. Treatment includes interim controls, abatement, and removal. Hazardous waste "treatment" is a method, technique, or process (such as neutralization) that is designed to change the physical, chemical, or biological character or composition of hazardous waste to neutralize it; render it nonhazardous or less hazardous; recover it; make it safer to transport, store, or dispose; or allow for easier recovery, storage, or volume reduction.

Treatment, Storage, and Disposal (TSD) facility: A facility licensed to handle hazardous waste.

Trisodium phosphate (TSP) detergent: A detergent that contains trisodium phosphate.

Trough: See Window trough.

Truck-mounted vacuum unit: A vacuum system whose components, except for hoses and attachments, are located outside the building undergoing dust removal. The exhaust is vented outside so that the interior dust is not disturbed.

TSD: See Treatment, Storage, and Disposal (TSD) facility.

TSP: See Trisodium phosphate (TSP) detergent.

 μ g (or ug): Micrograms. The prefix micromeans 1/1,000,000 (or one-millionth); a microgram is 1/1,000,000 of a gram and 1/1,000 of a milligram; equal to about 35/1,000,000,000 (35 billionths) of an ounce (an ounce is equal to 28,400,000 μ g).





Urethane-modified alkyd: An alkyd molecule that has been chemically modified by the incorporation of a urethane; a coating, often a varnish, that uses a urethane-modified alkyd resin in the binder.

Useful life: The life expectancy of a coating before it requires refinishing or some other form of maintenance.

VOC: See Volatile Organic Compound (VOC).

Volatile Organic Compound (VOC): Substances that vaporize or evaporate from a coating during the coating or curing process.

Walk-off mat: A washable, fibrous material (preferably with a rubber or vinyl backing) positioned at main entryways to reduce transport of lead dust and lead soil into a building or residence.

White lead: A white pigment, usually lead carbonate. See also Lead carbonate.

Window sill: See Interior window sill.

Window stool: See Interior window sill.

Window trough: For a typical double-hung window, the portion of the exterior window sill between the interior window sill (or stool) and the frame of the storm window. If there is no storm window, the window trough is the area that receives both the upper and lower window sashes when they are both lowered. Sometimes inaccurately called the window "well." See also Window well.

Window well: The space that provides exterior access and/or light to a window that is below grade, i.e., below the level of the surrounding earth or pavement. See also Window trough.

Worker: An individual who has completed training in an accredited program to perform lead-based paint hazard control in housing.

Worksite: Any interior or exterior area where lead-based paint hazard control work takes place.

Worksite preparation level: A set of measures designed to protect residents and the environment from leaded dust, paint chips, or other forms of lead contamination through the erection of barriers and the establishment of access control, resident relocation or movement restrictions, warning signs, ventilation, and other measures.

Worst-case sample: A sample of dwelling units having the greatest probability of containing lead-based paint hazards selected by a risk assessor on the basis of a visual examination of all dwelling units in a housing development or apartment building. See also Targeted sample and Random sample.

XRF analyzer: An instrument that determines lead concentration in milligrams per square centimeter (mg/cm²) using the principle of x-ray fluorescence (XRF). Two types of XRF analyzers are used—direct readers and spectrum analyzers. In these *Guidelines*, the term XRF analyzer only refers to portable instruments manufactured to analyze paint, and does not refer to laboratory-grade units or portable instruments designed to analyze soil.

Appendix 4

Inspector Certification



STATE OF CALIFORNIA DEPARTMENT OF PUBLIC HEALTH



LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:

CERTIFICATE TYPE:

NUMBER:

EXPIRATION DATE:

Lead Inspector/Assessor

LRC-00000459

5/31/2025

Lead Project Monitor

LRC-00000458

5/31/2025

Michelle Ehresman

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD

Appendix 5

CDPH 8552 Inspection Form

LEAD HAZARD EVALUATION REPORT

Section 1 — Date of Lead Hazard E	valuation 3/28/24				
Section 2 — Type of Lead Hazard E	valuation (Check o	ne box only)			
✓ Lead Inspection					
Section 3 — Structure Where Lead	Hazard Evaluation	Was Conducted			
Address [number, street, apartment (if app	licable)]	City		County	Zip Code
331 The City Drive (Building 6	6)	Orange		Orange	92868
Linknown		School or daycare Other		Children living in structure? Yes No Don't Know	
Section 4 — Owner of Structure (if	business/agency, li	st contact person)			
Name c/o Vanir Contruction (Scott Address [number, street, apartment (if app 4540 Duckhorn Drive, Suite	Battles)	City Sacramento	916	State	Zip Code 95834
Section 5 — Results of Lead Hazar	d Evaluation (check	all that apply)			
No lead hazards detected Section 6 — Individual Conducting Name Michelle Ehresman Address [number, street, apartment (if app 7742 Arjons Drive CDPH certification number LRC 0459 Name and CDPH certification number of a	licable)]	ation City San Diego ature	Tele	phone number 8-537-3999 State CA	Zip Code 92126 Date 3/28/24
Section 7 — Attachments					
A. A foundation diagram or sketch of the lead-based paint; B. Each testing method, device, and some content of the lead-based paint; C. All data collected, including quality	ampling procedure u	ısed;			
First copy and attachments retained by inspector Second copy and attachments retained by owner		California Departmer Childhood Lead Pois	nt of P coning way, l 1-6403	Prevention Branch Reports Building P, Third Floor	s

Appendix 6

Renovate Right



AUTION CAUTION

CAUTION

CAUTION

CAUTION







1-800-424-LEAD (5323) www.epa.gov/getleadsafe EPA-740-K-10-001 April 2010



Important lead hazard information for families, child care providers and schools.





IT'S THE LAW!

Federal law requires contractors that disturb painted surfaces in homes, child care facilities and schools, built before 1978 to be certified and follow specific work practices to prevent lead contamination. Always ask to see your contractor's certification.

Federal law requires that individuals receive certain information before renovating more than six square feet of painted surfaces in a room for interior projects or more than twenty square feet of painted surfaces for exterior projects or window replacement or demolition in housing, child care facilities and schools built before 1978.

- Homeowners and tenants: renovators must give you this pamphlet before starting work.
- Child care facilities, including preschools and kindergarten classrooms, and the families of children under six years of age that attend those facilities: renovators must provide a copy of this pamphlet to child care facilities and general renovation information to families whose children attend those facilities.



WHO SHOULD READ THIS PAMPHLET?

This pamphlet is for you if you:

- Reside in a home built before 1978.
- Own or operate a child care facility, including preschools and kindergarten classrooms, built before 1978, or
- Have a child under six years of age who attends a child care facility built before 1978.

You will learn:

- Basic facts about lead and your health.
- How to choose a contractor, if you are a property owner.
- What tenants, and parents/guardians of a child in a child care facility or school should consider.
- How to prepare for the renovation or repair job.
- What to look for during the job and after the job is done.
- Where to get more information about lead.

This pamphlet is not for:

- Abatement projects. Abatement is a set of activities aimed specifically at eliminating lead or lead hazards. EPA has regulations for certification and training of abatement professionals. If your goal is to eliminate lead or lead hazards, contact the National Lead Information Center at 1-800-424-LEAD (5323) for more information.
- "Do-it-yourself" projects. If you plan to do renovation work yourself, this document is a good start, but you will need more information to complete the work safely. Call the National Lead Information Center at 1-800-424-LEAD (5323) and ask for more

information on how to work safely in a home with lead-based paint.

Contractor education. Contractors
 who want information about working
 safely with lead should contact
 the National Lead Information
 Center at 1-800-424-LEAD (5323)
 for information about courses and
 resources on lead-safe work practices.



1

RENOVATING, REPAIRING, OR PAINTING?



- Is your home, your building, or the child care facility or school your children attend being renovated, repaired, or painted?
- Was your home, your building, or the child care facility or school where your children under six years of age attend built before 1978?

If the answer to these questions is YES, there are a few important things you need to know about lead-based paint.

This pamphlet provides basic facts about lead and information about lead safety when work is being done in your home, your building or the child care facility or school your children attend.

The Facts About Lead

- Lead can affect children's brains and developing nervous systems, causing reduced IQ, learning disabilities, and behavioral problems. Lead is also harmful to adults.
- Lead in dust is the most common way people are exposed to lead. People can also get lead in their bodies from lead in soil or paint chips. Lead dust is often invisible.
- Lead-based paint was used in more than 38 million homes until it was banned for residential use in 1978.
- Projects that disturb painted surfaces can create dust and endanger you and your family. Don't let this happen to you. Follow the practices described in this pamphlet to protect you and your family.

LEAD AND YOUR HEALTH

Lead is especially dangerous to children under six years of age.

Lead can affect children's brains and developing nervous systems, causing:

- Reduced IQ and learning disabilities.
- · Behavior problems.

Even children who appear healthy can have dangerous levels of lead in their bodies.

Lead is also harmful to adults. In adults, low levels of lead can pose many dangers, including:

- High blood pressure and hypertension.
- Pregnant women exposed to lead can transfer lead to their fetuses. Lead gets into the body when it is swallowed or inhaled.
- People, especially children, can swallow lead dust as they eat, play, and do other normal hand-to-mouth activities.
- People may also breathe in lead dust or fumes if they disturb lead-based paint.
 People who sand, scrape, burn, brush or blast or otherwise disturb lead-based paint risk unsafe exposure to lead.

What should I do if I am concerned about my family's exposure to lead?

- Call your local health department for advice on reducing and eliminating exposures to lead inside and outside your home, child care facility or school.
- Always use lead-safe work practices when renovation or repair will disturb painted surfaces.
- A blood test is the only way to find out if you or a family member already has lead poisoning. Call your doctor or local health department to arrange for a blood test.

For more information about the health effects of exposure to lead, visit the EPA lead website at www.epa.gov/lead/pubs/leadinfo.htm or call 1-800-424-LEAD (5323).

There are other things you can do to protect your family every day.

- Regularly clean floors, window sills, and other surfaces.
- Wash children's hands, bottles, pacifiers, and toys often.
- Make sure children eat a healthy, nutritious diet consistent with the USDA's dietary guidelines, that helps protect children from the effects of lead.
- Wipe off shoes before entering house.



WHERE DOES THE LEAD COME FROM?

Dust is the main problem.

The most common way to get lead in the body is from dust. Lead dust comes from deteriorating lead-based paint and lead-contaminated soil that gets tracked into your home. This dust may accumulate to unsafe levels. Then, normal hand to-mouth activities, like playing and eating (especially in young children), move that dust from surfaces like floors and window sills into the body.

Home renovation creates dust.

Common renovation activities like sanding, cutting, and demolition can create hazardous lead dust and chips.

Proper work practices protect you from the dust.

The key to protecting yourself and your family during a renovation, repair or painting job is to use lead-safe work practices such as containing dust inside the work area, using dust-minimizing work methods, and conducting a careful cleanup, as described in this pamphlet.

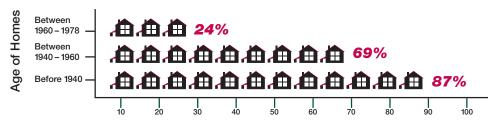
Other sources of lead.

Remember, lead can also come from outside soil, your water, or household items (such as lead-glazed pottery and lead crystal). Contact the National Lead Information Center at 1-800-424-LEAD (5323) for more information on these sources.



CHECKING YOUR HOME FOR LEAD-BASED PAINT

Percentage of Homes Likely to Contain Lead



Older homes, child care facilities, and schools are more likely to contain lead-based paint.

Homes may be single-family homes or apartments. They may be private, government-assisted, or public housing. Schools are preschools and kindergarten classrooms. They may be urban, suburban, or rural.

You have the following options:

You may decide to assume your home, child care facility, or school contains lead. Especially in older homes and buildings, you may simply want to assume lead-based paint is present and follow the lead-safe work practices described in this brochure during the renovation, repair, or painting job.

You can hire a certified professional to check for lead-based paint.

These professionals are certified risk assessors or inspectors, and can determine if your home has lead or lead hazards.

- A certified inspector or risk assessor can conduct an inspection telling you whether your home, or a portion of your home, has lead-based paint and where it is located. This will tell you the areas in your home where lead-safe work practices are needed.
- A certified risk assessor can conduct a risk assessment telling you if your home currently has any lead hazards from lead in paint, dust, or soil. The risk assessor can also tell you what actions to take to address any hazards.
- For help finding a certified risk assessor or inspector, call the National Lead Information Center at 1-800-424-LEAD (5323).

You may also have a certified renovator test the surfaces or components being disturbed for lead using a lead test kit. Test kits must be EPA-recognized and are available at hardware stores. They include detailed instructions for their use.

FOR PROPERTY OWNERS

You have the ultimate responsibility for the safety of your family, tenants, or children in your care.

This means properly preparing for the renovation and keeping persons out of the work area (see p. 8). It also means ensuring the contractor uses lead-safe work practices.

Federal law requires that contractors performing renovation, repair and painting projects that disturb painted surfaces in homes, child care facilities, and schools built before 1978 be certified and follow specific work practices to prevent lead contamination.

Make sure your contractor is certified, and can explain clearly the details of the job and how the contractor will minimize lead hazards during the work.

- You can verify that a contractor is certified by checking EPA's website at epa.gov/getleadsafe or by calling the National Lead Information Center at 1-800-424-LEAD (5323). You can also ask to see a copy of the contractor's firm certification.
- Ask if the contractor is trained to perform lead-safe work practices and to see a copy of their training certificate.
- Ask them what lead-safe methods they will use to set up and perform the job in your home, child care facility or school.
- Ask for references from at least three recent jobs involving homes built before 1978, and speak to each personally.

Always make sure the contract is clear about how the work will be set up, performed, and cleaned.

- Share the results of any previous lead tests with the contractor.
- You should specify in the contract that they follow the work practices described on pages 9 and 10 of this brochure.
- The contract should specify which parts of your home are part of the work area and specify which lead-safe work practices will be used in those areas. Remember, your contractor should confine dust and debris to the work area and should minimize spreading that dust to other areas of the home.
- The contract should also specify that the contractor will clean the work area, verify that it was cleaned adequately, and re-clean it if necessary.

If you think a worker is not doing what he is supposed to do or is doing something that is unsafe, you should:

- Direct the contractor to comply with regulatory and contract requirements.
- Call your local health or building department, or
- Call EPA's hotline 1-800-424-LEAD (5323).

If your property receives housing assistance from HUD (or a state or local agency that uses HUD funds), you must follow the requirements of HUD's Lead-Safe Housing Rule and the ones described in this pamphlet.

FOR TENANTS AND FAMILIES OF CHILDREN UNDER SIX YEARS OF AGE IN CHILD CARE FACILITIES AND SCHOOLS

You play an important role ensuring the ultimate safety of your family.

This means properly preparing for the renovation and staying out of the work area (see p. 8).

Federal law requires that contractors performing renovation, repair and painting projects that disturb painted surfaces in homes built before 1978 and in child care facilities and schools built before 1978, that a child under six years of age visits regularly, to be certified and follow specific work practices to prevent lead contamination.

The law requires anyone hired to renovate, repair, or do painting preparation work on a property built before

1978 to follow the steps described on pages 9 and 10 unless the area where the work will be done contains no lead-based paint.

If you think a worker is not doing what he is supposed to do or is doing something that is unsafe, you should:

- · Contact your landlord.
- · Call your local health or building department, or
- Call EPA's hotline 1-800-424-LEAD (5323).

If you are concerned about lead hazards left behind after the job is over, you can check the work yourself (see page 10).



7

PREPARING FOR A RENOVATION

The work areas should not be accessible to occupants while the work occurs.

The rooms or areas where work is being done may need to be blocked off or sealed with plastic sheeting to contain any dust that is generated. Therefore, the contained area may not be available to you until the work in that room or area is complete, cleaned thoroughly, and the containment has been removed. Because you may not have access to some areas during the renovation, you should plan accordingly.

You may need:

- Alternative bedroom, bathroom, and kitchen arrangements if work is occurring in those areas of your home.
- A safe place for pets because they too can be poisoned by lead and can track lead dust into other areas of the home.
- A separate pathway for the contractor from the work area to the outside in order to bring materials in and out of the home. Ideally, it should not be through the same entrance that your family uses.
- A place to store your furniture. All furniture and belongings may have to be moved from the work area while the work is being done. Items that can't be moved, such as cabinets, should be wrapped in plastic.
- To turn off forced-air heating and air conditioning systems while the work is being done. This prevents dust from spreading through vents from the work area to the rest of your home. Consider how this may affect your living arrangements.

You may even want to move out of your home temporarily while all or part of the work is being done.

Child care facilities and schools may want to consider alternative accommodations for children and access to necessary facilities.



DURING THE WORK

Federal law requires contractors that are hired to perform renovation, repair and painting projects in homes, child care facilities, and schools built before 1978 that disturb painted surfaces to be certified and follow specific work practices to prevent lead contamination.

The work practices the contractor must follow include these three simple procedures, described below:

- 1. Contain the work area. The area must be contained so that dust and debris do not escape from that area. Warning signs must be put up and plastic or other impermeable material and tape must be used as appropriate to:
 - Cover the floors and any furniture that cannot be moved.
 - Seal off doors and heating and cooling system vents.

These will help prevent dust or debris from getting outside the work area.

2. Avoid renovation methods that generate large amounts of lead-contaminated dust.

Some methods generate so much lead-contaminated dust that their use is prohibited.

They are:

- · Open flame burning or torching.
- Sanding, grinding, planing, needle gunning, or blasting with power tools and equipment not equipped with a shroud and HEPA vacuum attachment.
- Using a heat gun at temperatures greater than 1100°F.

There is no way to eliminate dust, but some renovation methods make less dust than others. Contractors may choose to use various methods to minimize dust generation, including using water to mist areas before sanding or scraping; scoring paint before separating components; and prying and pulling apart components instead of breaking them.

- **3. Clean up thoroughly.** The work area should be cleaned up daily to keep it as clean as possible. When all the work is done, the area must be cleaned up using special cleaning methods before taking down any plastic that isolates the work area from the rest of the home. The special cleaning methods should include:
 - Using a HEPA vacuum to clean up dust and debris on all surfaces, followed by
 - Wet wiping and wet mopping with plenty of rinse water.

When the final cleaning is done, look around. There should be no dust, paint chips, or debris in the work area. If you see any dust, paint chips, or debris, the area must be re-cleaned.

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FOR PROPERTY OWNERS: AFTER THE WORK IS DONE

When all the work is finished, you will want to know if your home, child care facility, or school has been cleaned up properly. Here are some ways to check.

Ask about your contractor's final cleanup check. Remember, lead dust is often invisible to the naked eye. It may still be present even if you cannot see it. The contractor must use disposable cleaning cloths to wipe the floor of the work area and compare them to a cleaning verification card to determine if the work area was adequately cleaned.

To order a cleaning verification card and detailed instructions visit the EPA lead website at www.epa.gov/lead or contact the National Lead Information Center at 1-800-424-LEAD (5323) or visit their website at www.epa.gov/lead/nlic.htm.

You also may choose to have a lead-dust test. Lead-dust tests are wipe samples sent to a laboratory for analysis.

- You should specify in your contract that a lead-dust test will be done. In this case, make it clear who will do the testing.
- Testing should be done by a lead professional.

If you choose to do the testing, some EPA-recognized lead laboratories will send you a kit that allows you to collect samples and send them back to the lab for analysis.

Contact the National Lead Information Center at 1-800-424-LEAD (5323) for lists of qualified professionals and EPA-recognized lead labs.

If your home, child care facility, or school fails the dust test, the area should be re-cleaned and tested again.

Where the project is done by contract, it is a good idea to specify in the contract that the contractor is responsible for re-cleaning if the home, child care facility, or school fails the test.



FOR ADDITIONAL INFORMATION

You may need additional information on how to protect yourself and your children while a job is going on in your home, your building, or child care facility.

The National Lead Information Center at 1-800-424-LEAD (5323) or www.epa.gov/lead/nlic.htm can tell you how to contact your state, local, and/or tribal programs or get general information about lead poisoning prevention.

- State and tribal lead poisoning prevention or environmental protection programs can provide information about lead regulations
- and potential sources of financial aid for reducing lead hazards. If your state or local government has requirements more stringent than those described in this pamphlet, you must follow those requirements.
- Local building code officials can tell you the regulations that apply to the renovation work that you are planning.
- State, county, and local health departments can provide information about local programs, including assistance for lead-poisoned children and advice on ways to get your home checked for lead.

The National Lead Information Center can also provide a variety of resource materials, including the following guides to lead-safe work practices. Many of these materials are also available at www.epa.gov/lead/pubs/brochure.htm.

- Steps to Lead Safe Renovation, Repair and Painting.
- Protect Your Family from Lead in Your Home
- Lead in Your Home: A Parent's Reference Guide





For the hearing impaired, call the Federal Information Relay Service at 1-800-877-8339 to access any of the phone numbers in this brochure.

10 11

OTHER FEDERAL AGENCIES

EPA Regional Offices

EPA addresses residential lead hazards through several different regulations. EPA requires training and certification for conducting abatement and renovations, education about hazards associated with renovations, disclosure about known lead paint and lead hazards in housing, and sets lead-paint hazard standards.

Your Regional EPA Office can provide further information regarding lead safety and lead protection programs at **epa.gov/lead**.

Region 1

(Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island, Vermont) Regional Lead Contact U.S. EPA Region 1 Suite 1100 One Congress Street Boston, MA 02114-2023 (888) 372-7341

Region 2

(New Jersey, New York, Puerto Rico, Virgin Islands) Regional Lead Contact U.S. EPA Region 2 2890 Woodbridge Avenue Building 205, Mail Stop 225 Edison, NJ 08837-3679 (732) 321-6671

Region 3

(Delaware, Maryland, Pennsylvania, Virginia, Washington, DC, West Virginia) Regional Lead Contact U.S. EPA Region 3 1650 Arch Street Philadelphia, PA 19103-2029 (215) 814-5000

Region 4

(Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee) Regional Lead Contact U.S. EPA Region 4 61 Forsyth Street, SW Atlanta, GA 30303-8960 (404) 562-9900

Region 5

(Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin) Regional Lead Contact U.S. EPA Region 5 77 West Jackson Boulevard Chicago, IL 60604-3507 (312) 886-6003

Region 6

(Arkansas, Louisiana, New Mexico, Oklahoma, Texas) Regional Lead Contact U.S. EPA Region 6 1445 Ross Avenue, 12th Floor Dallas, TX 75202-2733 (214) 665-6444

Region 7

(Iowa, Kansas, Missouri, Nebraska) Regional Lead Contact U.S. EPA Region 7 901 N. 5th Street Kansas City, KS 66101 (913) 551-7003

Region 8

(Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming) Regional Lead Contact U.S. EPA Region 8 1595 Wynkoop Street Denver, CO 80202 (303) 312-6312

Region 9

(Arizona, California, Hawaii, Nevada) Regional Lead Contact U.S. Region 9 75 Hawthorne Street San Francisco, CA 94105 (415) 947-8021

Region 10

(Alaska, Idaho, Oregon, Washington) Regional Lead Contact U.S. EPA Region 10 1200 Sixth Avenue Seattle, WA 98101-1128 (206) 553-1200

CPSC

The Consumer Product Safety
Commission (CPSC) protects the public
from the unreasonable risk of injury or
death from 15,000 types of consumer
products under the agency's jurisdiction.
CPSC warns the public and private
sectors to reduce exposure to lead and
increase consumer awareness. Contact
CPSC for further information regarding
regulations and consumer product safety.

CPSC

4330 East West Highway Bethesda, MD 20814 Hotline 1-(800) 638-2772 www.cpsc.gov

CDC Childhood Lead Poisoning Prevention Branch

The Centers for Disease Control and Prevention (CDC) assists state and local childhood lead poisoning prevention programs to provide a scientific basis for policy decisions, and to ensure that health issues are addressed in decisions about housing and the environment. Contact CDC Childhood Lead Poisoning Prevention Program for additional materials and links on the topic of lead.

CDC Childhood Lead Poisoning Prevention Branch

4770 Buford Highway, MS F-40 Atlanta, GA 30341 (770) 488-3300 www.cdc.gov/nceh/lead

HUD Office of Healthy Homes and Lead Hazard Control

The Department of Housing and Urban Development (HUD) provides funds to state and local governments to develop cost-effective ways to reduce lead-based paint hazards in America's privately-owned low-income housing. In addition, the office enforces the rule on disclosure of known lead paint and lead hazards in housing, and HUD's lead safety regulations in HUD-assisted housing, provides public outreach and technical assistance, and conducts technical studies to help protect children and their families from health and safety hazards in the home. Contact the HUD Office of Healthy Homes and Lead Hazard Control for information on lead regulations, outreach efforts, and lead hazard control research and outreach grant programs.

U.S. Department of Housing and Urban Development

Office of Healthy Homes and Lead Hazard Control 451 Seventh Street, SW, Room 8236 Washington, DC 20410-3000 HUD's Lead Regulations Hotline (202) 402-7698 www.hud.gov/offices/lead/

12 13



SAMPLE PRE-RENOVATION FORM

This sample form may be used by renovation firms to document compliance with the Federal pre-renovation education and renovation, repair, and painting regulations.

Occupant Confirmation Pamphlet Receipt

□ I have received a copy of the lead hazard information pamphlet informing me of the potential risk of the lead hazard exposure from renovation activity to be performed in my dwelling unit. I received this pamphlet before the work began.					
Printed Name of Owner-occupant					
Signature of Owner-occupant	Signature Date				
Renovator's Self Certification Option (for tend Instructions to Renovator: If the lead hazard int signature was not obtainable, you may check t	formation pamphlet was delivered but a tenant				
pamphlet to the rental dwelling unit listed b	faith effort to deliver the lead hazard information elow at the date and time indicated and that the of receipt. I further certify that I have left a copy nt.				
	welling unit listed below and that the occupant receipt. I further certify that I have left a copy of				
Printed Name of Person Certifying Delivery	Attempted Delivery Date				
Signature of Person Certifying Lead Pamphlet	Delivery				
Unit Address					

Note Regarding Mailing Option — As an alternative to delivery in person, you may mail the lead hazard information pamphlet to the owner and/or tenant. Pamphlet must be mailed at least seven days before renovation. Mailing must be documented by a certificate of mailing from the post office.

COMPREHENSIVE ASBESTOS SURVEY REPORT FOR DEMOLITION

PROJECT NAME:

ORANGE COUNTY JUVENILE HALL-BUILDING 7

PROJECT ADDRESS:

331 The City Drive, S. Orange, California 92868

Prepared for:

Mr. Scott L. Battles Vanir Construction Management, Inc 4540 Duckhorn Drive, Suite 300 Sacramento, California 95834

Prepared by:

MTGL, Inc. 7742 Arjons Dr. San Diego, California 92126 858-537-3999

Project Number:

SDPE-24-061.1CT

Report By:

Michelle Ehresman, CAC

CAC Certification Number: 14-5323 CAC Expiration Date: November 19, 20204

Date of Report:

April 22, 2024

Version 1.0

TABLE OF CONTENTS

INTRODUCTIONSection 1
General Information
Project Information
Site/Building Description
Suspect Materials Observed
INVESTIGATION LIMITATIONS & WARRANTYSection 2
ASBESTOS SURVEY METHODOLOGYSection 3
General References
Visual Inspection
Homogeneous Material Classifications
Sampling Procedures
Laboratory Procedures
Method of Analysis
Laboratory Quality Control Program
ASBESTOS SURVEY OBSERVATIONS AND FINDINGS Section 4
Summary
Table 1: Positively Identified Materials that Contain Asbestos (ACM and ACCM) and
Assessment of Material Condition.
Table 2: Materials found to be Negative for Asbestos
General Information
Environmental Protection Agency (EPA)
California Occupational Safety & Health Agency (Cal/OSHA)
National Emission Standards for Hazardous Air Pollutants (NESHAP)
CONCLUSIONS & RECOMMENDATIONS Section 5
APPENDICES Section 6
Appendix 1 – Asbestos Laboratory Results & Chain of Custodies
Appendix 2 – Site Map with Sample Location
Appendix 3 – Photo Documentation
Appendix 4 – Inspector Certifications

SECTION 1 INTRODUCTION

GENERAL INFORMATION

MTGL, Inc. was retained to conduct a survey for suspect asbestos containing materials. The intent of this survey is to pre-determine the presence of EPA/OSHA regulated Asbestos Containing Materials and Asbestos Containing Construction Materials (ACCM) that may need to be addressed prior to scheduled demolition and/or renovation activities.

Buildings 2, 5, 7 and 9 shared the same homogeneous silver rolled roofing system and black roofing mastic. Samples collected were representative of the shared roofing materials.

MTGL's scope of work was limited to the following:

- Review of project drawings.
- Conduct a pre-construction asbestos inspection limited to Client specified locations in accordance with NESHAP Regulations and the collection of bulk samples of suspect ACM.
- Submit samples to a NVLAP accredited laboratory for analysis of asbestos fiber content using polarized-light microscopy.
- Prepare report with material description, sampling locations, analytical results, and recommendations for proper handling/abatement prior to demolition and/or renovation activities.

PROJECT INFORMATION

Survey Requested/Authorized By: Mr. Scott L. Battles

Type of Survey Requested: Limited (Restricted to Client Specified Locations Only)

Destructive Sampling Allowed by Client: Yes

Project Name: ORANGE COUNTY JUVENILE HALL BUILDING 7

Project Address: 331 The City of Orange Dr. S in the city of Orange in the State of California.

Date of Inspection: March 28, 2024 to April 2, 2024

AHERA Certified Building Inspector Name: Darla Beery

AHERA Certified Building Inspector Number: 2023ABCA171101

Additional AHERA Certified Building Inspector Name: Michelle Ehresman

Additional AHERA Certified Building Inspector Number: ABIR0727230010N35227

Local Air District: South Coast Air Quality Management District (Sampling method, lab

qualifications, lab analytical procedures, and lab method of analysis were

performed in compliance with Rule 1403 (d)(1)(A) and 40 CFR Part 763 - Asbestos. requirments)

Laboratory: EMLab P&K, LLC – ID#: 3590829/3600732

9445 Farnham St, Suite 103, San Diego, CA 92123 (866) 888-6653 Fax (623) 780-7695 www.emlab.com

Laboratory Sample Analysis Method: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA

METHOD 600/R-93-116, SOP EM-AS-S-1267)

Sampling Protocols: EPA 40CFR 763.86 Methods

SITE/BUILDING DESCRIPTION

Structure Type: Commercial Facility

Year Built: Unknown

Date of known additions: Unknown

Building Structural Damage (If Any): None Observed

Approximate Square Feet of Surveyed Area: 13,000

Structure Frame: Wood

If other, describe: None

Structure Foundation: Concrete Slab On Grade

If other, describe: None

Number of Floors: 1

Building Occupied: Yes

SUSPECT MATERIALS OBSERVED

Suspect Materials Observed During the Asbestos Survey Conducted

- 1'x1' Acoustic Ceiling Tile and Fissured Ceiling Tile
- Epoxy Floor
- Concrete Wall
- Carpet Glue
- Pipe Insulation and Pipe Elbow Insulation
- Fiberglass Insulation
- Concrete Slab
- Concrete Stone and Concrete Block Wall
- Brick and Mortar
- Concrete Texture Coat (Soffit)
- Window Sealant
- Ceramic Wall and Floor Tile
- Silver Coated Rolled Roofing and Silver Coated Roof Mastic

Inaccessible Materials Presumed to be Asbestos Content: None

SECTION 2 INVESTIGATION LIMITATIONS & WARRANTY

Per the agreement between The Client and MTGL, Inc., the scope of services was performed as described in this report.

The intent of this survey is to pre-determine the presence of EPA/OSHA regulated asbestos containing building materials that may need to be addressed prior to scheduled demolition and/or renovation activities.

INVESTIGATION LIMITATIONS

MTGL, Inc. did not conduct testing within interstitial wall cavities, ceiling plenums, HVAC ventilation systems or crawlspaces or other locations of the facility, outside of the Client specified areas.

The findings of this report are valid as of the date of the survey and sample collection. Changes in the condition of the property can occur with passage of time, whether they are due to natural processes or the works of man on this or adjacent properties. In addition, changes in the state-of-art technology and/or government codes may occur. Due to such changes, the findings of this report may be invalidated wholly or in part by conditions beyond our control. Due to changes that can occur over time, submittals of this report to Regulatory Agencies may require additional site visits and assessment to document current conditions.

The final assessment of the potential for the existence of hazardous contaminants at the site should be considered a professional opinion based on the data obtained during the investigation and should not be considered a definitive statement that a hazardous contaminant or conditions are, or is not, present in the area of study. These opinions have been derived in accordance with current standards of practice.

This report is intended solely for use by the parties to whom it is addressed. This report is not intended for and may not contain sufficient information for purposes other than qualitative evaluation of asbestos or conditions at the time of our evaluation. Reliance on this report for other purposes or by other parties shall be at the user's sole risk.

WARRANTY

MTGL, Inc. warrants that the findings contained herein have been prepared with the level of care and skill exercised by experienced and knowledgeable environmental consultants who are appropriately licensed or otherwise trained to perform asbestos inspections and assessments pursuant to the scope of work required on this project. MTGL's Asbestos Survey Reports are prepared by trained certified professionals without a conflict of interest in the demolition(s) or renovation project(s) as per the Business and Professions Code 7180 (BP7180).

MTGL, Inc. warrants that the findings contained herein have been prepared in general accordance with accepted professional practices as applied by similar professionals in the community at the time of its preparation. Changes in the state of the art or in applicable regulations cannot be anticipated and have not been addressed in this report.

The survey included inspection of visible and accessible materials. MTGL did not inspect or sample inaccessible areas and did not dismantle any part of the structure to survey inaccessible areas. For the purpose of this warranty, inaccessible is defined as areas that could not be tested (sampled) without destruction of the structure or a portion of the structure. Inaccessible materials that are visible to MTGL's inspectors shall be assumed to be asbestos containing. No other warranty is expressed, or implied.

SECTION 3 ASBESTOS SURVEY METHODOLOGY

GENERAL REFERENCES

The asbestos survey consisted of two major activities: visual inspection and sampling. Although these activities are listed separately, they are integrated tasks.

VISUAL INSPECTION

The visual inspection was performed by an AHERA Certified Building Inspector under the direction of a California Certified Asbestos Consultant. An initial building walkthrough was conducted to determine the presence of suspect materials that were accessible or exposed. Materials that were similar in general appearance were grouped into homogeneous sampling areas.

HOMOGENEOUS MATERIAL CLASSIFICATIONS

A preliminary walkthrough of the building was conducted to determine areas of materials that were visually similar in color, texture, and general appearance and that appeared to have been installed at the same time. Such materials are termed "homogeneous materials" by the EPA. During this walkthrough, the approximate locations of these homogeneous materials were noted. Only materials that were accessible or exposed and suspected to contain asbestos were identified.

Following the EPA protocols, each identified suspect homogeneous material is placed in one of the following EPA classifications:

- Surfacing Materials (spray or trowel applied materials)
- Thermal System Insulation (materials applied to various mechanical systems)
- Miscellaneous Materials (any material which do not fit either of the above categories, such as floor tiles, etc.)

SAMPLING PROCEDURES

Following the walkthrough, the inspector collected selected samples of exposed or accessible materials identified as suspect material. Sampling was limited to accessible materials not involving destruction of walls, other building elements, physical barriers, or the structural integrity of the item being tested.

EPA guidelines were used to determine the sampling protocol. Sampling locations that were chosen to be representative of the homogeneous sampling area. While an effort was made to collect samples randomly, samples were taken preferentially from damaged areas or areas which were the least visible to minimize disturbance of the material.

Samples of surfacing material were collected in general accordance with the EPA random sampling protocol outlined in the EPA publication, "Asbestos in Buildings: Simplified Sampling Scheme for Friable Surfacing Materials" (EPA 560/5-85-030a, October 1985).

Samples of miscellaneous materials were also taken as randomly as possible, while attempting to sample already damaged areas so as to minimize disturbance of the material.

A minimum of three samples were collected of each homogeneous material. Depending on the quantity of homogeneous material, additional samples may be collected to avoid the possibility of false negative results.

LABORATORY PROCEDURES

Method of Analysis

Analysis was performed by visually observing the bulk sample and preparing slides for microscopic examination and identification. The samples were mounted on slides and then analyzed for asbestos (chrysotile, amosite, crocidolite, anthophyllite, and actinolite/tremolite), fibrous non-asbestos constituents (mineral wool, paper, etc.) and nonfibrous constituents. Asbestos was identified by refractive indices, morphology, color, pleochroism, birefringence, extinction characteristics, and signs of elongation. The same characteristics were used to identify the non-asbestos constituents.

The microscopist used a stereoscope to visually estimate relative amounts of each constituent using a stereoscope to determine the volume of each constituent in proportion to the total volume of the sample.

All bulk samples were analyzed by Polarized Light Microscopy (PLM) with dispersion staining as described by the Interim Method of the Determination of Asbestos in Bulk Insulation, Federal Register, 40 CFR Ch. 1 Pt. 763, App. A to Subpart. F, July 1, 1987. This is a standard method of analysis in optical mineralogy and the currently accepted method for the determination of asbestos in bulk samples. A suspect material is immersed in a solution of known refractive index and subjected to illumination by polarized light. The characteristic color displays that result enable mineral identification. It should be noted that some ACM may not be accurately identified or quantified by PLM. As an example, the original fabrication of vinyl floor tiles routinely involved milling of asbestos fibers to extremely small sizes. As a result, these fibers may go undetected under the standard polarized light microscopy method. Transmission Electron Microscopy (TEM) is recommended for a more definitive analysis of these materials. MTGL, Inc. has no control over how the laboratory describes materials or layers of materials being analyzed. Although a minimum of three samples are collected of suspect building materials, first positive stops may be requested of the laboratory and the results of the one positive sample will be reported. All other homogeneous materials will be assumed to be positive for asbestos content.

Laboratory Quality Control Program

MTGL, Inc. only uses laboratories that maintain an in-house quality control program. This program involves blind reanalysis of ten percent of all samples, precision and accuracy controls, and use of standard bulk reference materials.

SECTION 4 ASBESTOS OBSERVATIONS AND FINDINGS

SUMMARY

Table 1: Positively Identified Materials that Contain Asbestos (ACM and ACCM) and Assessment of Material Condition (as of the date the survey was conducted). Laboratory Results can be found in Appendix 1.

Material* Description	Location*	Sample #	Approximate Quantity**	AHERA Rank**	Friability/ Material Type	Damage Category	Quantity of Contamination (If any) **	Asbestos Content
Pipe Elbow Insulation	Throughout	16	Undetermined as wrap may run behind walls or inside soffits.	7	Friable	1	None	15% Gray Insulation White Wrap None Detect
Note: Samples	s 17, 18 were not ar	nalyzed due	to prior positive s	eries.				
2'x4' Fissured Ceiling Tile	Hallways	43, 44	4, 000 sf	7	Friable	1	None	3% Amosite
Roof Mastic (See below note.)	Building 2 (Under Vinyl Cap Sheet on North End)	R-14	1,800 sf	X	Non-Friable	1	None	4%

Note: Sample R14 (roof mastic) pertains only to the <u>North end of Building 2</u> under vinyl cap sheet. Sample is included with report as it is a part of the same Chain of Custody (COC) and lab report as the remainder of the samples for Bldgs. 2, 5, 7 and 9.

- (1) Damaged or significantly damaged thermal system insulation ACM.
- (2) Damaged friable surfacing ACM.
- (3) Significantly damaged friable surfacing ACM.
- (4) Damaged or significantly damaged friable miscellaneous ACM.
- (5) ACBM with potential for damage.
- (6) ACBM with potential for significant damage.
- (7) Any remaining friable ACBM or friable suspected ACBM.
- (X) Not applicable (material is non-friable surfacing or miscellaneous material).

The damage categories are defined as follows:

^{*}Positively identified ACM and ACCM that are similar in color and texture in other locations throughout the structure and facility shall be considered as asbestos containing until further sampling/analysis determines otherwise. In the event suspect asbestos containing materials are discovered during maintenance, renovation and/or demolition that are not identified in this report, disturbance of the materials should be stopped until further assessment of the material for asbestos content can be conducted.

^{**}MTGL, Inc. is not responsible for actual quantity of the material(s). MTGL recommends bidding contractors measure and calculate quantities for estimated abatement costs and notifications. (sf= square foot; NA= not applicable))

^{***}Each homogeneous area of friable and non-friable asbestos-containing material (ACM) was classified into one of the following seven categories, as specified in EPA's AHERA regulations (40 CFR 763.88):

Category 1 - "Undamaged" means the material had no visible damage, or extremely minor damage or surface marring (i.e., a room full of floor tile with only two or three small corners chipped off on the tile).

Category 2 - "Damaged" means the material had visible damage evenly distributed over less than 10% of its surface, or localized over less than 25% of its surface.

Category 3 - "Significantly Damaged" means the material had visible damage that is evenly distributed over 10% or more of its surface, or localized over 25% or more if its surface.

Table 2: Materials found to be Negative for Asbestos (as of the date the survey was conducted). Laboratory results can be found in Appendix 1.

Material* Description	Sample #
1'x1' Acoustic Ceiling Tile	1, 2, 3
Epoxy Floor	4, 5, 6
Concrete Wall	7, 8, 9
Carpet Glue	10, 11, 12
Pipe Insulation	13, 14, 15
Concrete Ceiling	19, 20, 21
Fiberglass Insulation Wrap	22, 23, 24
Concrete Slab	25, 26, 27
Concrete Stone	28, 29, 30
Concrete Block Wall	31, 32, 33
Brick and Mortar	34, 35, 36
Concrete Texture Coat (Soffit)	37, 38, 39
Window Sealant	40, 41, 42
Ceramic Floor Tile	46, 47, 48
Ceramic Wall Tile	49, 50, 51
Ceiling Insulation	52, 53, 54
Fiberglass Pipe Wrap	55, 56, 57

Samples R-1 through R-13 are Homogeneous to the shared roofing systems for Building 2, 5, 7 and 9.		
Silver Rolled Roofing over Insulation	R-1, R2, R3, R-4, R-5	
Roof Mastic	R-6, R-7, R-8, R-9, R-10	
HVAC Caulk	R-11. R12, R-13	

GENERAL INFORMATION

Environmental Protection Agency (EPA)

According to the South Coast Air Quality Management District's Rule 1402 paragraph (H)(2)(C), the analysis of composite samples of multi-layered material including, but not limited to, stucco (base and scratch coat) and wall systems is prohibited for the quantification of asbestos content. All separable layers shall be analyzed and reported separately for asbestos content.

These materials are eligible for analyzed using 1,000 Point Count with Gravimetric Reduction methods. Analysis would be conducted per strata and materials found to be greater than 0.1% asbestos are regulated by OSHA and handled as asbestos containing until packaged and stored for disposal. Materials greater than 1% are regulated by EPA/APCD and would require disposal as asbestos containing material.

A material is considered by the EPA and the State of California to be asbestos-containing if at least one sample collected from the area shows asbestos present in an amount greater than one percent (> 1%).

California Occupational Safety & Health Agency (Cal/OSHA)

Title 8, California Code of Regulation 1529 defines asbestos-containing construction materials as materials containing greater than one-tenth of one percent (0.1%) asbestos by weight. Under this code, materials containing between 0.1% and 1% asbestos are regulated as other regulated operations. Although operations involving materials containing between 0.1% and 1% asbestos are not considered Class I, II, or III work, several sections of the standard are applicable, including negative exposure assessments and the use of regulated areas.

Laboratory analysis may report materials as "Trace Asbestos". These materials are assumed to be greater than 0.1%. Upon client request, these materials can be analyzed using 1,000 Point Count with Gravimetric Reduction methods. Materials found to be greater than 0.1% asbestos are regulated by OSHA and handled as asbestos containing until packaged and stored for disposal.

Please refer to the laboratory analysis for a more detailed description of the microscopic analysis of these samples.

Asbestos-containing materials (ACM) are regulated by federal, state, and local agencies, which include but may not be limited to the following:

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) requires an inspection for asbestos be done on facilities that are to undergo demolition or renovation work. Materials found to contain asbestos may need to be removed prior to the start of such demolition/renovation work.

NESHAP defines Category I non-friable asbestos-containing materials as gaskets, resilient floor covering, and asphalt roofing products that contain more than one percent asbestos, and Category II non-friable as any materials, except for Category I non-friable, that contain more than one percent asbestos and cannot be reduced to a powder by hand pressure when dry. NESHAP defines a Regulated Asbestos-Containing Material (RACM) as: (a) friable ACM, (b) Category I non-friable that has become friable, (c) Category I non-friable that has or may be subject to sanding, grinding, cutting, or abrading, and (d) Category II non-friable that may or has become friable during demolition or renovation.

SECTION 5 CONCLUSIONS & RECOMMENDATIONS

CONCLUSIONS

On this asbestos survey, materials observed and tested for asbestos were positive for asbestos content.

The pipe insulation elbows were reported to contain >1% asbestos.

The 2'x4' fissured ceiling times were reported to contain >1% asbestos.

While the silver coated rolled roofing and roofing mastic is negative for asbestos on Building 7, sample R14 (roof mastic) pertains only to North end of Building 2 under vinyl cap sheet. The sample is included with report as it is a part of the same Chain of Custody (COC) and lab report as the remainder of the samples for Buildings 2, 5, 7 and 9.

RECOMMENDATIONS

If during renovation activities, materials other than the ones discussed in this report are observed, the materials should be tested for asbestos content prior to disturbance.

General

MTGL recommends that all asbestos containing materials be removed prior to any renovation and/or demolition activities, which may impact the materials. A Licensed Abatement Contractor in the State of California should perform the removal activities.

Removal of ACM/ACCM should be conducted in accordance with EPA and OSHA requirements for Federal, State and Local rules and regulations. All asbestos removal should be conducted using wet methods and engineering controls to reduce airborne fiber concentrations. OSHA required personal protective equipment must be used for worker protection. All activities that may disturb or disrupt asbestos containing material must be conducted in properly demarcated regulated areas using wet removal methods.

Proper decontamination methods must be used by all workers entering and leaving regulated work areas where asbestos containing materials are being removed.

In the event ACM or ACCM materials are observed to be damaged and/or visible contamination is present, isolate the immediate area, turn off HVAC systems. Only properly trained and certified workers may enter the work area to conducted clean-up activities using wet methods.

If renovation and/or demolition activities do not impact the asbestos containing materials, then the materials can be managed in place. Periodic surveillance is recommended. An Operations & Maintenance (O&M) program should be established and conducted by properly trained personnel. Minimum training for each type of material that has been identified should be given as required by Cal/OSHA. Additionally, postings would be required in all publicly accessible areas warning of the potential hazard to satisfy the Proposition 65 & Hazard Communication regulations.

SECTION 6 APPENDICES

APPENDIX 1 ASBESTOS LABORATORY RESULTS & CHAIN OF CUSTODY



Report for:

Mr. Carl Tucker MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126

Eurofins EPK Built Environment Testing, LLC Project: Vanir Const. - OC Juvenile Hall; 331 The City of Orange - B7 Regarding:

EMĹ ID: 3590829

Approved by:

Dates of Analysis: Asbestos PLM: 04-03-2024

Approved Signatory Carlos Rivadeneyra

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267) NVLAP Lab Code 500034-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Eurofins EPK Built Environment Testing, LLC

9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Date of Sampling: 03-28-2024 Date of Receipt: 03-29-2024 Date of Report: 04-03-2024

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange - B7

ASBESTOS PLM REPORT

Total Samples Submitted: 57 **Total Samples Analyzed:** 55

Lab ID-Version 1: 17559218-1

Lab ID-Version 1: 17559219-1

Lab ID Version + 17550221 1

EMLab ID: 3590829, Page 2 of 15

Total Samples with Layer Asbestos Content > 1%: 3

Location: 1, 1'x1' Acoustic Ceiling Tile

Location, 1, 1 Al Treodytic Coming The	•
Sample Layers	Asbestos Content
Brown Mastic	ND
Brown Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	80% Cellulose
_	2% Talc
Sample Composite Homogeneity:	Moderate

Location: 2, 1'x1' Acoustic Ceiling Tile

, 8	·
Sample Layers	Asbestos Content
Brown Mastic	ND
Brown Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	80% Cellulose 2% Talc
Sample Composite Homogeneity:	Moderate

Location: 3, 1'x1' Acoustic Ceiling Tile	Lab ID-Version‡: 17559220-1
Sample Layers	Asbestos Content
Brown Mastic	ND
Brown Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	80% Cellulose
	2% Talc
Sample Composite Homogeneity:	Moderate

Location: 4 Enovy Floor

Location: 4, Epoxy Floor	Lau ID- Version; 17559221-1
Sample Layers	Asbestos Content
Gray Flooring	ND
Sample Composite Homogeneity:	Good

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Eurofins EPK Built Environment Testing, LLC

9445 Farnham Street, Suite 103, San Diego, CA 92123

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EMLab ID: 3590829, Page 3 of 15

C/O: Mr. Carl Tucker Date of Sampling: 03-28-2024 Re: Vanir Const. - OC Juvenile Hall; 331 The City of Date of Receipt: 03-29-2024 Orange - B7 Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Client: MTGL, Inc.

Location: 5, Epoxy Floor Lab ID-Version‡: 17559222-1

Sample Layers	Asbestos Content
Gray Flooring	ND
Sample Composite Homogeneity:	Good

Location: 6, Epoxy Floor Lab ID-Version 17559223-1

Sample Layers	Asbestos Content
Gray Flooring	ND
Sample Composite Homogeneity:	Good

Location: 7, Concrete Wall Lab ID-Version 17559224-1

Sample Layers	Asbestos Content
Gray Concrete	ND
White Paint	ND
Sample Composite Homogeneity: Moderate	

Location: 8, Concrete Wall Lab ID-Version : 17559225-1

Sample Layers	Asbestos Content
Gray Concrete	ND
White Paint	ND
Sample Composite Homogeneity: Moderate	

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

 \ddagger A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Eurofins EPK Built Environment Testing, LLC

9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Lab ID-Version 1: 17559227-1

Lab ID-Version 17559228-1

EMLab ID: 3590829, Page 4 of 15

C/O: Mr. Carl Tucker Date of Sampling: 03-28-2024 Re: Vanir Const. - OC Juvenile Hall; 331 The City of Orange - B7

Date of Receipt: 03-29-2024 Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Client: MTGL, Inc.

Location: 9, Concrete Wall Lab ID-Version‡: 17559226-1

Sample Layers	Asbestos Content
Gray Concrete	ND
White Paint	ND
Sample Composite Homogeneity: Moderate	

Location: 10. Carnet Glue

Location: 10, curper Glac	
Sample Layers	Asbestos Content
Yellow Carpet Glue	ND
Sample Composite Homogeneity:	Good

Location: 11. Carpet Glue

Sample Layers	Asbestos Content
Yellow Carpet Glue	ND
Sample Composite Homogeneity:	Good

Location: 12, Carpet Glue	Lab ID-Version‡: 17559229-1
Sample Layers	Asbestos Content
Yellow Carpet Glue	ND
Sample Composite Homogeneity:	Good

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

 \ddagger A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

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Lab ID-Version‡: 17559230-1

Lab ID-Version‡: 17559231-1

Lab ID-Version 1: 17559232-1

Lab ID-Version 1: 17559233-1

EMLab ID: 3590829, Page 5 of 15

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange - B7

Date of Sampling: 03-28-2024 Date of Receipt: 03-29-2024 Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Location: 13, Pipe Insulation

, <u> </u>	
Sample Layers	Asbestos Content
Yellow Insulation	ND
White Wrap	ND
Composite Non-Asbestos Content:	60% Glass Fibers
-	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 14, Pipe Insulation

Sample Layers	Asbestos Content
Yellow Insulation	ND
White Wrap	ND
Composite Non-Asbestos Content:	60% Glass Fibers 10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 15. Pipe Insulation

Location: 12,1 Tpc Institution	***************************************
Sample Layers	Asbestos Content
Yellow Insulation	ND
White Wrap	ND
Composite Non-Asbestos Content:	60% Glass Fibers
_	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 16. Pipe Elbow Insulation

Location: 10, 1 lpc Libow insulation	Em 15 (61316114, 1766)266 1
Sample Layers	Asbestos Content
Gray Insulation	5% Chrysotile
White Wrap	ND
Composite Non-Asbestos Content:	10% Cellulose
	10% Glass Fibers
Sample Composite Homogeneity:	Moderate

Comments: Samples 17-18 were not analyzed due to prior positive series.

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Lab ID-Version 1: 17559237-1

Lab ID-Version 1: 17559239-1

EMLab ID: 3590829, Page 6 of 15

C/O: Mr. Carl Tucker Date of Sampling: 03-28-2024 Re: Vanir Const. - OC Juvenile Hall; 331 The City of Date of Receipt: 03-29-2024 Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Client: MTGL, Inc.

Orange - B7

Location: 19, Concrete Ceiling Lab ID-Version‡: 17559236-1

Sample Layers	Asbestos Content
White Concrete	ND
White Paint	ND
Sample Composite Homogeneity: Moderate	

Location: 20. Concrete Ceiling

Zocaron 20, concrete coming	
Sample Layers	Asbestos Content
White Concrete	ND
White Paint	ND
Sample Composite Homogeneity: Moderate	

Location: 21. Concrete Ceiling

Location: 21, Concrete Ceiling	Lab ID-Version‡: 17559238-1
Sample Layers	Asbestos Content
White Concrete	ND
White Paint	ND
Sample Composite Homogeneity:	Moderate

Location: 22, Fiberglass ins w/Wrap and Tape

Sample Layers	Asbestos Content
Yellow Insulation	ND
Tan Adhesive	ND
Silver Wrap	ND
Composite Non-Asbestos Content:	80% Glass Fibers 10% Cellulose
Sample Composite Homogeneity:	Poor

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Lab ID-Version : 17559241-1

Lab ID-Version : 17559242-1

EMLab ID: 3590829, Page 7 of 15

Client: MTGL, Inc. C/O: Mr. Carl Tucker Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange - B7

Date of Sampling: 03-28-2024 Date of Receipt: 03-29-2024 Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Location: 23, Fiberglass ins w/Wrap and Tape

Location: 23, Fiberglass ins w/Wrap and Tape	Lab ID-Version‡: 17559240-1
Sample Layers	Asbestos Content
Yellow Insulation	ND
Tan Adhesive	ND
Silver Wrap	ND
Composite Non-Asbestos Content:	80% Glass Fibers
	10% Cellulose
Sample Composite Homogeneity:	Poor

Location: 24, Fiberglass ins w/Wrap and Tape

Sample Layers	Asbestos Content
Yellow Insulation	ND
Tan Adhesive	ND
Silver Wrap	ND
Composite Non-Asbestos Content:	80% Glass Fibers
-	10% Cellulose
Sample Composite Homogeneity:	Poor

Location: 25, Concrete Slab

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity: Moderate	

Location: 26, Concrete Slab Lab ID-Version‡: 17559243-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Moderate

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EMLab ID: 3590829, Page 8 of 15

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange - B7

Date of Sampling: 03-28-2024 Date of Receipt: 03-29-2024 Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Location: 27, Concrete Slab Lab ID-Version : 17559244-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity: Moderate	

Location: 28, Concrete Stone Lab ID-Version 1: 17559245-1

Sample Layers	Asbestos Content
Tan Concrete	ND
Sample Composite Homogeneity:	Good

Location: 29, Concrete Stone Lab ID-Version 1: 17559246-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 30, Concrete Stone Lab ID-Version : 17559247-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

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Lab ID-Version‡: 17559248-1

Lab ID-Version‡: 17559250-1

Lab ID-Version 1: 17559251-1

EMLab ID: 3590829, Page 9 of 15

Date of Sampling: 03-28-2024 Date of Receipt: 03-29-2024 Date of Report: 04-03-2024

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange - B7

ASBESTOS PLM REPORT

Location: 31, Concrete Block Wall

Sample Layers	Asbestos Content
Gray Concrete	ND
Tan Paint	ND
Sample Composite Homogeneity: Moderate	

Location: 32. Concrete Block Wall

Location: 32, Concrete Block Wall	Lab ID-Version‡: 17559249-1
Sample Layers	Asbestos Content
Gray Concrete	ND
Tan Paint	ND
Sample Composite Homogeneity:	Moderate

Location: 33, Concrete Block Wall

Sample Layers	Asbestos Content
Gray Concrete	ND
Tan Paint	ND
Sample Composite Homogeneity: Moderate	

Location: 34, Brick and Mortar

Sample Layers	Asbestos Content
Gray Mortar	ND
Red Brick	ND
Sample Composite Homogeneity:	Moderate

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Lab ID-Version‡: 17559252-1

Lab ID-Version 1: 17559253-1

Lab ID-Version 1: 17559254-1

Lab ID-Version : 17559255-1

Date of Sampling: 03-28-2024 Date of Receipt: 03-29-2024 Date of Report: 04-03-2024

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange - B7

ASBESTOS PLM REPORT

Location: 35, Brick and Mortar

Sample Layers	Asbestos Content
Gray Mortar	ND
Red Brick	ND
Sample Composite Homogeneity: Moderate	

Location: 36. Brick and Mortar

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Sample Layers	Asbestos Content
Gray Mortar	ND
Red Brick	ND
Sample Composite Homogeneity:	Moderate

Location: 37. Concrete Texture Coat

Sample Layers	Asbestos Content
Beige Paint	ND
Gray Texture Coat	ND
Dark Gray Concrete	ND
Sample Composite Homogeneity: Poor	

Location: 38, Concrete Texture Coat

Sample Layers	Asbestos Content
Beige Paint	ND
Gray Texture Coat	ND
Sample Composite Homogeneity:	Poor

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Lab ID-Version 1: 17559257-1

Lab ID-Version 17559258-1

Date of Sampling: 03-28-2024 Date of Receipt: 03-29-2024 Date of Report: 04-03-2024

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of Orange - B7

ASBESTOS PLM REPORT

Location: 39. Concrete Texture Coat

Location: 39, Concrete Texture Coat	Lab ID-Version‡: 17559256-1
Sample Layers	Asbestos Content
Beige Paint	ND
Gray Texture Coat	ND
Sample Composite Homogeneity: Poor	

Location: 40. Window Sealant

Location: 10, William Scalaric	
Sample Layers	Asbestos Content
Black Sealant	ND
Sample Composite Homogeneity:	Good

Location: 41. Window Sealant

Sample Layers	Asbestos Content
Black Sealant	ND
Sample Composite Homogeneity:	Good

Location: 42. Window Sealant

Location: 42, Window Sealant	Lab ID-Version‡: 17559259-1
Sample Layers	Asbestos Content
Black Sealant	ND
Sample Composite Homogeneity:	Good

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Lab ID-Version‡: 17559260-1

Lab ID-Version 1: 17559261-1

Lab ID-Version 1: 17559263-1

Client: MTGL, Inc. C/O: Mr. Carl Tucker Date of Sampling: 03-28-2024 Re: Vanir Const. - OC Juvenile Hall; 331 The City of Date of Receipt: 03-29-2024 Orange - B7 Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Location: 43, Fissured Ceiling Tile

Sample Layers	Asbestos Content
Gray Ceiling Tile with White Surface	3% Amosite
Composite Non-Asbestos Content:	60% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 44. Fissured Ceiling Tile

Zocation 11,1155area coming the	
Sample Layers	Asbestos Content
Gray Ceiling Tile with White Surface	3% Amosite
Composite Non-Asbestos Content:	60% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 45. Fissured Ceiling Tile

Location: 45, Fissured Ceiling Tile	Lab ID-Version‡: 17559262-1
Sample Layers	Asbestos Content
Gray Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	60% Cellulose
-	20% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 46, Ceramic Floor Tile

Sample Layers	Asbestos Content
White Thinset	ND
Beige Mastic	ND
Tan Ceramic Tile	ND
Sample Composite Homogeneity: Poor	

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Lab ID-Version‡: 17559264-1

Lab ID-Version 1: 17559265-1

Lab ID-Version 1: 17559267-1

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange - B7

Date of Sampling: 03-28-2024 Date of Receipt: 03-29-2024 Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Location: 47, Ceramic Floor Tile

	·
Sample Layers	Asbestos Content
White Paper	ND
Tan Ceramic Tile	ND
Composite Non-Asbestos Content:	2% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 48, Ceramic Floor Tile

Sample Layers	Asbestos Content
White Thinset	ND
Beige Mastic	ND
Tan Ceramic Tile	ND
Sample Composite Homogeneity: Poor	

Location: 49. Ceramic Wall Tile

Location: 49, Ceramic Wall Tile	Lab ID-Version‡: 17559266-1
Sample Layers	Asbestos Content
Gray Thinset	ND
White Ceramic Tile	ND
Sample Composite Homogeneity: Moderate	

Location: 50. Ceramic Wall Tile

	•
Sample Layers	Asbestos Content
Gray Thinset	ND
White Ceramic Tile	ND
Sample Composite Homogeneity: Moderate	

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Lab ID-Version :: 17559270-1

Client: MTGL, Inc. C/O: Mr. Carl Tucker Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange - B7

Date of Sampling: 03-28-2024 Date of Receipt: 03-29-2024 Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Location: 51, Ceramic Wall Tile

Location: 51, Ceramic Wall Tile	Lab ID-Version‡: 17559268-1
Sample Layers	Asbestos Content
Gray Thinset	ND
White Ceramic Tile	ND
Sample Composite Homogeneity:	Moderate

Location: 52. Ceiling Insulation

Location: 52, Ceiling Insulation	Lab ID-Version‡: 1755926								
Sample Layers	Asbestos Content								
Yellow Insulation	ND								
Composite Non-Asbestos Content:	99% Glass Fibers								
Sample Composite Homogeneity:	Good								

Location: 53, Ceiling Insulation

Sample Layers	Asbestos Content
Yellow Insulation	ND
Composite Non-Asbestos Content:	99% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 54, Ceiling Insulation	Lab ID-Version‡: 17559271-1
Sample Layers	Asbestos Content
Yellow Insulation	ND
Composite Non-Asbestos Content:	99% Glass Fibers
Sample Composite Homogeneity:	Good

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Lab ID-Version‡: 17559272-1

Lab ID-Version †: 17587987-1

Client: MTGL, Inc. C/O: Mr. Carl Tucker Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange - B7

Date of Sampling: 03-28-2024 Date of Receipt: 03-29-2024 Date of Report: 04-03-2024

ASBESTOS PLM REPORT

Location: 55, Fiberglass Pipe Wrap

Sample Layers	Asbestos Content
Yellow Wrap	ND
Composite Non-Asbestos Content:	85% Glass Fibers
_	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 56. Fiberglass Pipe Wrap

Location: 56, Fiberglass Pipe Wrap	Lab ID-Version‡: 17559273-1
Sample Layers	Asbestos Content
Yellow Wrap	ND
Composite Non-Asbestos Content:	85% Glass Fibers
_	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 57 Fiberglass Pine Wran

Location: 37, Fiberglass Tipe Wrap	Date 12 Version 4. 17307707 1
Sample Layers	Asbestos Content
Yellow Wrap	ND
Composite Non-Asbestos Content:	85% Glass Fibers
_	10% Cellulose
Sample Composite Homogeneity:	Moderate

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Built Environment Testing

WEATHER Fog Rain Snow Wind Clear None 니 Light Moderate

REQU

Non-Culturable

East: (866) 871 Central: (800) 6 West: (866) 888	551-4802					Щ Moderate Heavy	3		Spore Tape, BioCasse Swab, W. Swab, Bulk Contact Plate							1- 1-			
				T INFORMA									(Buria)			7400)			
Contact: (IMTG CARLTU 619-454			Address: 7' Special Instru + 15†	742 / ctions: POS1-	Arjons Dr twe Sty	:,San Die	9192126				4sp spp.	s. spp.) Vir and Surface Bac	ence		Count (NIOSH 74			
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Project Description: Project Zip Code:	Vanir (331 T 92868 5D8-24-	Sampled	St 3	Hall -B7 28-24 me	ND - Nex	TURN AROUND TIME CODES - (TAT) Indard (Default) Rushes received after 2pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend/Holiday/ASAP				croscopic Exam (Quality	aracterization	urface Fungi (Ger	7 5	nella culture Coliform, E aoû (Presence	Quantifray-Sewage Screen OTHER: (please specify lest)	s in Air - PCM Airborne	17	b) - Flame AA	sase specify test) s (please specify test)
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BC - BioCasse A1S - Anderse SAS - Surface	en Air Sampler	CP - Contact Plate ST - Spore Trap B - Bulk		O - Other:	2	Parla Bea	-y	3 -28 - 21			6	_	2	_		3	0	8	00

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Built Environment Testing

Fog Rain Snow Wind Clear WEATHER None LEVEL Light Moderate

REQU Non-Culturable BioCasse



ast: (866) 871-1984 entral: (800) 651-480 /est: (866) 888-6653	2		Moderate Heavy		Spo	CO 10000	Tape, ab. Bu	0	Casse (ab, W	00	3590	829	MT THEIR CO.	i die ine
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	PROJECT INFORMATION		TURN AROUND 1	rIME CODES - (TAT)		(artive)	Exa	+ 0	+ Asp	Aha	9	Fiber		
escription: 33 roject 921	1 The City of cronge of Barrhing Date/Time: 5 3 28	B7 ND - Nex	andard (Default) t Business Day ne Business Day sekend/Holiday/ASA	Rushes received after 2 or on weekends, will b considered received the next business day. Pleat alert us in advance or weekend analysis need.	e e e e e e e e e e e e e e e e e e e	Other biological particles - suppli Direct Microscopic Exam (Qualit	live spore count direct exam	Characterization dia Surface Fungi (Genus ID + Asp	Culturable Air Fungi (Genus ID + Asp. spp.)	Legioneila culture	Total Conform, a box (Present Quantifray Sewage Screen OTHER (please specify test)	s in Air - PCM Airborne	s Bulk - PLM	PCR (please specify test) Allergens (please specifly test)
SAMPLE ID	DESCRIPTION	Sample TAT Type (Above)	Total Volume/Area (as applicable)	NOTES (Time of day, Temp, RH, etc	o e	Other bit	Ouantilative	1-Media	Culturab	Legione	Quantifray OTHER: (p)	Asbestos in Air	Asbestos Load (Pb	PCR (pl
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25	Concrete Slab												1	
27	Concrete stone												1	
30	₩	4	RELINQUISH	ED BY DATE & T	ME		-	RECE	EIVED	BY		1		& TIME
BC - BioCassette [®] A1S - Andersen SAS - Surface Air Sa NP - Non-potable Wa	ST - Spore Trap SW - Swab mpler B - Bulk SO - Spil	O - Other	Darla Be					0		2		3	0	291 80

CHAIN OF CUSTODY & eurofins WEATHER Fog Rain Snow Wind Clear **Built Environment Testing** None www.eurofinsus.com/Built 딟 Non-Culturable Light è Moderate BioCass East: (866) 871-1984 Tape; Swab, W Heavy Trap Swab, Bulk Central: (800) 651-4802 West: (866) 888-6653 CONTACT INFORMATION Address. 7742 Atjous DR., San Diogo, 14 Special Instructions: MTGL, Inc. Company: CARLTUCKU Contact: 619-454-7851 Phone. TURN AROUND TIME CODES - (TAT) PROJECT INFORMATION Vanir Coust - Oc Tuvenile Hall STD - Standard (Default) Rushes received after 2pm Project ID: or on weekends, will be ND - Next Business Day Project: 331 The City of Orange B7 considered received the Description: next business day. Please Project SD - Same Business Day alert us in advance of Zip Code weekend analysis needs. WH - Weekend/Holiday/ASAP 5085-24-061.10T BY PO Number Sample NOTES TAT Volume/Area DESCRIPTION Type (Time of day, Temp, RH, etc.) SAMPLE ID (Above) (as applicable) (Below) block wall 57D ~ Isqin 31 32 33 35 Soffet 38

SAMPLE TYPE CODES O - Other: T - Tape CP - Contact Plate BC - BioCassette SW - Swab ST - Spore Trap A15 - Andersen SO - Soil B - Bulk SAS - Surface Air Sampler D - Dust P - Potable Water NP - Non-potable Water

DATE & TIME RELINQUISHED BY 3-28-24 3-28

RECEIVED BY

CHAIN OF CUSTODY 💸 eurofins

www.eurofinsus.com/Built

East: (866) 871-1984

Built Environment Testing

WEATHER Fog Rain Snow Wind Clear
None
Light
Moderate
Heavy

		REQUES
Non-C	ulturable	Cul
Spore	Tape	BioCassette"



00359082

Central: (800) 651-4802 West: (866) 888-6653					Heavy			Tra		vab. E		Swat	b, Wat	ter ont.			-		_	
		CONTACT	INFORMA	TION									Bacteria)				(00)			
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	tucker 454-7851		accini mana	o constant	Ü		72126						spp.)		nce)		Count (N			
William Control	PROJECT INFORMATIO	N			TURN AROUND	TIME CODES	- (TAT)		ernerit ative)	жаш		D+A	Asp ble A		Abse		Fiber			
Project 331 Project 928	The City of Sampled 24-061,107 By	Twenile Cronge- 5:31281 DB/G	B7	ND - Next	ndard (Default) Business Day e Business Day ekend/Holiday/ASA	or on we consider next busi alert us	eceived after 2pm eekends, will be red received the ness day. Please s in advance of d analysis needs.	Neis.	Other biological particles - supplement Direct Microscopic Exam (Qualitative)	count	Oharacterization	Surface Fungi (Genus II	Cutturable Air Fungi (Genus ID + Asp. spp.) Gram Stain and Counts (Culturable Air and	a culture	Total Coliform, E coli (Presence/Absence OraniTray Sewade Screen	OTHER (please specify test)	Asbestos in Air - PCM Airborne Fiber	Bulk - PLM	Lead (Pb) - Plame AM PCR (please specify test)	Allergens (please speofily test)
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Report for:

Mr. Carl Tucker MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126

Eurofins EPK Built Environment Testing, LLC Project: Vanir Const. - OC Juvenile Hall; 331 The City of Orange B2, 5, 7, and 9 Regarding:

EMĹ ID: 3600732

Approved by:

Dates of Analysis: Asbestos PLM: 04-11-2024

Approved Signatory Carlos Rivadeneyra

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267) NVLAP Lab Code 500034-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Date of Sampling: 04-02-2024 Date of Receipt: 04-08-2024 Date of Report: 04-11-2024

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B2, 5, 7, and 9

ASBESTOS PLM REPORT

Total Samples Submitted: 16 **Total Samples Analyzed:** 16 **Total Samples with Layer Asbestos Content > 1%:**

Lab ID-Version 1: 17610976-1

Lab ID-Version 1: 17610977-1

Lab ID-Version 1: 17610978-1

EMLab ID: 3600732, Page 2 of 6

Location: R-1. Silver Rolled Roofing Over Insulation - 7

Sample Layers	Asbestos Content
Brown Fibrous Material	ND
Black Roofing Felt 3	ND
Black Roofing Felt 2	ND
Black Roofing Felt 1	ND
Black/White Roofing Material	ND
Composite Non-Asbestos Content:	20% Glass Fibers 10% Cellulose
Sample Composite Homogeneity:	Poor

Location: R-2, Silver Rolled Roofing Over Insulation - 9

Sample Layers	Asbestos Content
Brown Fibrous Material	ND
Black Roofing Tar and Felt	ND
Black Roofing Felt	ND
Black/White Roofing Material	ND
Composite Non-Asbestos Content:	20% Glass Fibers 10% Cellulose
Sample Composite Homogeneity:	Poor

Location: R-3, Silver Rolled Roofing Over Insulation - 5

Sample Layers	Asbestos Content
Brown Fibrous Material	ND
Black Roofing Tar and Felt 3	ND
Black Roofing Tar and Felt 2	ND
Black Roofing Tar and Felt 1	ND
Black/White Roofing Material	ND
Composite Non-Asbestos Content:	20% Glass Fibers
-	10% Cellulose
Sample Composite Homogeneity:	Poor

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Lab ID-Version‡: 17610979-1

EMLab ID: 3600732, Page 3 of 6

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B2, 5, 7, and 9

Date of Sampling: 04-02-2024 Date of Receipt: 04-08-2024 Date of Report: 04-11-2024

ASBESTOS PLM REPORT

Location: R-4, Silver Rolled Roofing Over Insulation - 2

Sample Layers	Asbestos Content
Brown Fibrous Material	ND
Black Roofing Tar and Felt 2	ND
Black Roofing Tar and Felt 1	ND
Black/White Roofing Material	ND
Composite Non-Asbestos Content:	20% Glass Fibers 10% Cellulose
Sample Composite Homogeneity:	Poor

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9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Lab ID-Version‡: 17610980-1

Lab ID-Version 1: 17610981-1

EMLab ID: 3600732, Page 4 of 6

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B2, 5, 7, and 9

Date of Sampling: 04-02-2024 Date of Receipt: 04-08-2024 Date of Report: 04-11-2024

ASBESTOS PLM REPORT

Location: R-5, Silver Rolled Roofing Over Insulation - 2

Sample Layers	Asbestos Content
Brown Fibrous Material	ND
Black Roofing Tar and Felt 3	ND
Black Roofing Tar and Felt 2	ND
Black Roofing Tar and Felt 1	ND
Black/White Roofing Material	ND
Composite Non-Asbestos Content: 20% Glass Fibers	
	10% Cellulose
Sample Composite Homogeneity:	Poor

Location: R-6, Roof Mastic - 9

Sample Layers	Asbestos Content
Black Roofing Mastic	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: R-7, Roof Mastic - 7	Lab ID-Version‡: 17610982-1
Sample Layers	Asbestos Content
Black Roofing Mastic	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Lacation, D. Q. Doof Mostic 5

Location: K-8, Roof Mastic - 5	Lab ID- version 4: 1/010983-1
Sample Layers	Asbestos Content
Black Roofing Mastic	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

C/O: Mr. Carl Tucker Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B2, 5, 7, and 9

Client: MTGL, Inc.

Date of Sampling: 04-02-2024 Date of Receipt: 04-08-2024 Date of Report: 04-11-2024

ASBESTOS PLM REPORT

Location: R-9, Roof Mastic - 5 Lab ID-Version : 17610984-1

Sample Layers	Asbestos Content
Black Roofing Mastic	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: R-10, Roof Mastic - 2

Lab ID-Version 1: 17610985-1

,	
Sample Layers	Asbestos Content
Black/White Roofing Mastic	ND
Composite Non-Asbestos Content:	10% Cellulose
-	10% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: R-11, HVAC Caulk/Tape - 7

Lab ID-Version : 17610986-1

Sample Layers	Asbestos Content
Brown/Black Non-Fibrous Material	ND
Gray/White Caulk	ND
Sample Composite Homogeneity:	Poor

Location: R-12, HVAC Caulk/Tape - 5

Lab ID-Version 1: 17610987-1

EMLab ID: 3600732, Page 5 of 6

Sample Layers	Asbestos Content
Gray/White Caulk	ND
Sample Composite Homogeneity: Moderate	

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Lab ID-Version‡: 17610988-1

Lab ID-Version 1: 17610989-1

Lab ID-Version 1: 17610990-1

Lab ID-Version 1: 17610991-1

EMLab ID: 3600732, Page 6 of 6

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B2, 5, 7, and 9

Date of Sampling: 04-02-2024 Date of Receipt: 04-08-2024 Date of Report: 04-11-2024

ASBESTOS PLM REPORT

Location: R-13, HVAC Caulk/Tape - 2

Sample Layers	Asbestos Content
Gray/White Caulk	ND
Sample Composite Homogeneity: Moderate	

Location: R-14. Vinvl Cap Sheet - B2

Sample Layers	Asbestos Content
Green Mastic	ND
Gray Fibrous Material	ND
White Non-Fibrous Material	ND
Composite Non-Asbestos Content:	15% Synthetic Fibers
Sample Composite Homogeneity:	Poor

Location: R-15, Vinyl Cap Sheet - B2

	· ·
Sample Layers	Asbestos Content
White Fibrous Material	ND
White Non-Fibrous Material	ND
Composite Non-Asbestos Content:	15% Synthetic Fibers
Sample Composite Homogeneity:	Poor

Location: R-16, Vinvl Cap Sheet - B2

Location: It 10, viny! cap sheet D2	
Sample Layers	Asbestos Content
Black Mastic	4% Chrysotile
Green Mastic	ND
White Fibrous Material	ND
White Non-Fibrous Material	ND
Composite Non-Asbestos Content:	15% Synthetic Fibers
Sample Composite Homogeneity:	Poor

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

CHAIN OF CUSTODY 💸 eurofins	WEATHER	Fog Rain Snow Wind Clear		256-30	
www.eurofinsus.com/Built Built Environment ast: (866) 871-1984 eentral: (800) 651-4802 Yest: (866) 888-6653		Tog You State Wild Clear	Non-Culturable Spore Tape, Trap Swah, Bul	BioCasie Swab, W 00360	00732
				Tal III	
roject ID Vanir Coust Oc Twente Hat streescription: 331 The City of orange B-2,5,89	TURN AROUND THE		sticks - supplement Exam (Qualitative) count direct exam	Fungi (Genus ID + Asp. app.) ngi (Genus ID + Asp. siyi.) Counts (Curturable Air and Surface Bacter) coe (Presence:Absence) ge Screen	is specify time.) PCM Airborne Fiber Court (NIOSH 7400) PLM re AA. retify test.) e specify test.)
D Number DE-24-061-ICT By: WH	H - Weekend/Holiday/ASAP TAT Total Volume/Area (as applicable)	alert us in advance of weekend analysis needs. NOTES (Time of day, Temp, RH, etc.)	Spore Trap Analy Other biological p Direct Microscopii Cuantitative spore Dust Characteriza	da Surface rrable Ar Fu Stain and C meta cultum Coliform E riTray-Sewit	OTHER (presse specing) Asbestos in Air - PCM Air Asbestos Bulk - PLM Lead (Plb) - Flame AA PCR (please specify test) Allorgens (please specify
R-2 R4 R5 R6 R6 R7 R8	TO ~ (591n	79 52 2 1			i.
2 11 HVAC Conte/Tape 12 13 12 13 12 14 14 VOLD DB 4-2-24		5 DB Z			
SAMPLE TYPE CODES	Mighelle The			CEIVED BY	04 6 12 06 0 9

By submitting this Chain of Custody, you agree to be bound by the terms and conditions set forth at: https://www.eurofinsus.com/environment-testing/built-environment/resources/sampling-guides-and-forms ©COPYRIGHT 2022 EUROFINS EPK BUILT ENVIRONMENT TESTING, LLC

CHAIN OF CUSTODY & eurofins

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East: (866) 871-1984 Central: (800) 651-4802 West: (866) 888-6653

Built Environment Testing

V	VEATHER	Fog	Rain	Snow	Wind	Cles
	None Light					
LEVEL	Moderate					
-	Heavy					

REQUEST
Cultu

Non-Culturable BioCassette " /

Spore



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Company MTG	ucku		Address. 7 Special Instru	742 I	Arjous Di	z.,San Di	9/92/26				0.0	luface Bacteri				Count (NIOSH 7408)			
	4-7851								Ш		dds dsp	spp.		8		time (Н
P	ROJECT INFORMATIO				TURN AROUND	TIME CODES	- (TAT)		ment dive	1	1 + 1	Asp ole Ale		upseq.		D se C			
roject ID: Van'r roject 331 - roject 939/	Coust - OC. The City of Sampling Date Time:	Towenile	Half STD - Standar		ND - Next Business Day or on wee considere		eceived after 2pm seekends, will be ared received the iness day. Please	100	Exam (Qualitative)		ungi (Genus ID	gi (Genus ID + Asp. spp.) ounts (Culturable Air and Surface		coh (Presence/Absence ade Screun	specify test)	CM Arbome F	N.	7 - Hume AA are specify less)	specify test)
	Sumpled Sumpled By:	00	5		ekend/Holiday/ASA		is in advance of d analysis needs.	Arraby		cterizal	face F	and O	office	Sewsa	(please s	Air - P	W.P.	special specia	ease
SAMPLE ID	DESCRIPTION	ON	Sample Type (Below)	TAT (Above)	Total Volume/Area (as applicable)	N	IOTES y, Temp, RH, etc.)	Spore Trap	Direct Mora	Dust Chara	1-Media Su	Culturable / Gram Stain	Tegionesia (Total Colifor QuantiTray		Asbestos in	B sop	PCR (pease	E S
15 WRIT	ny (cap s	heet	В	SID		B - B -	2												
	SAMPLE TYPE CODE				RÉLINQUISHE	En By	DATE & TIME			DE	CEIM	E0.8							
BC - BioCassette		T - Tape	O - Other:	11		A STATE OF THE STA	-	-	_	KE	CEIV	ED B	1					8 TIN	
A1S - Andersen SAS - Surface Air Sampler NP - Non-potable Water	ST - Spore Trap B - Bulk	SW - Swab SO - Soil D - Dust		C	icyllo The	huta	4/5/24			2	_	1				6	28	D	4

United States Department of Commerce National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 500034-0

Eurofins EMLab P&K

San Diego, CA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2024-01-01 through 2024-12-31

Effective Dates



For the National Voluntary Laboratory Accreditation Program



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Eurofins EMLab P&K

9445 Farnham St #103 San Diego, CA 92123 Quynh Nguyen Phone: 800-651-4802

Email: quynh.nguyen@et.eurofinsus.com https://www.eurofinsus.com/environment-testing/

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 500034-0

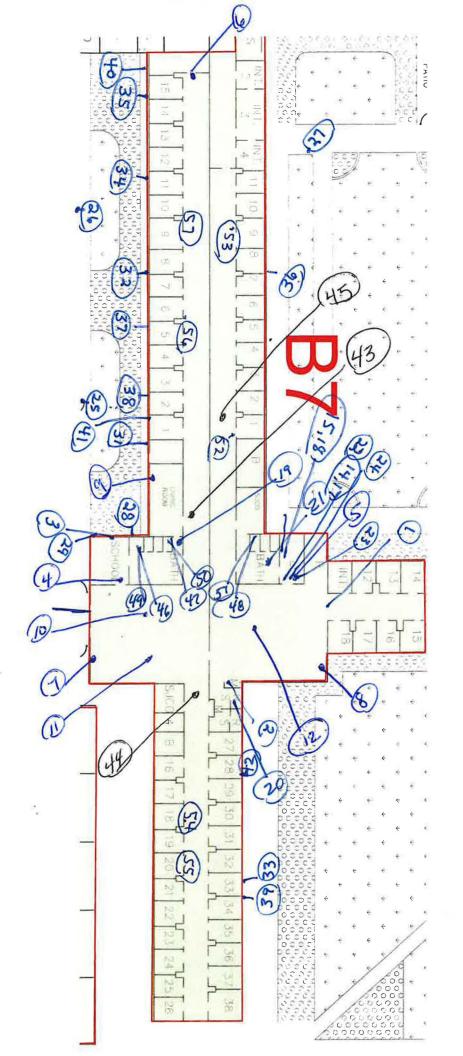
Bulk Asbestos Analysis

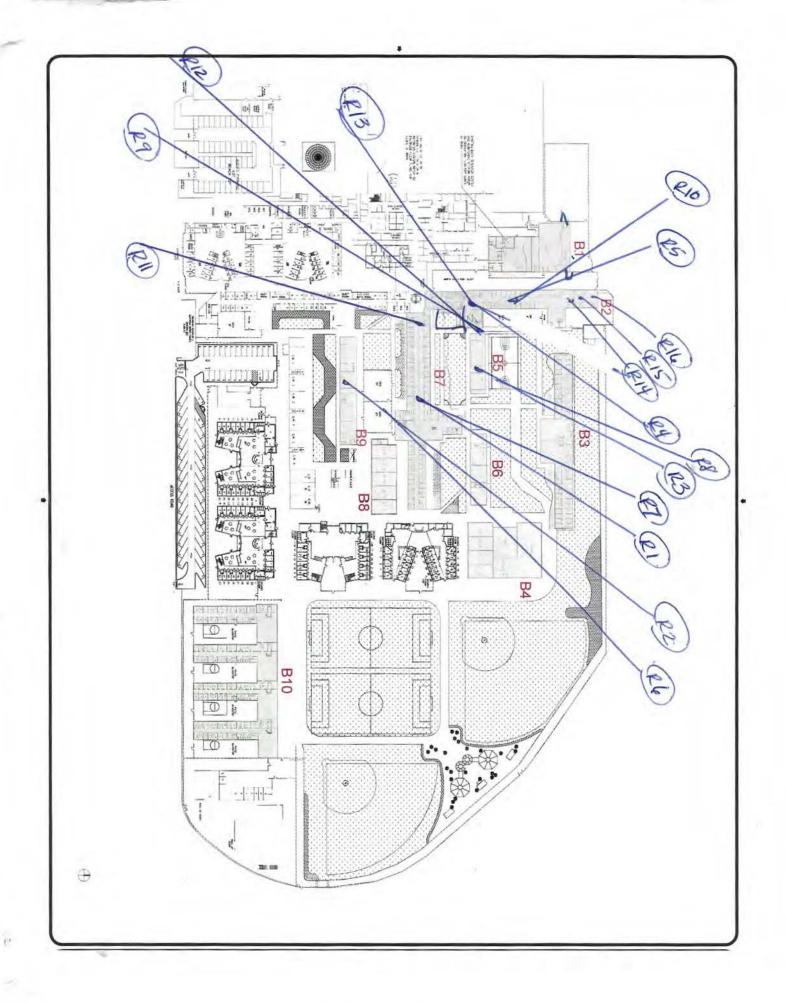
<u>Code</u>	<u>Description</u>
18/A01	EPA 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

For the National Voluntary Laboratory Accreditation Program

APPENDIX 2

SAMPLE LOCATION MAP (NOT TO SCALE)





APPENDIX 3 PHOTO DOCUMENTATION



1. Epoxy floor and carpet adhesive.



2. Concrete ceiling.



3. Ceramic wall and floor tile, wall block.



4. Fissured ceiling tile.



5. Brick & mortar.



6. Block wall.

7. Fiberglass insulation wrap w/ tape, Pipe insulation, and Block wall.



8. Pink fiberglass insulation

APPENDIX 4 INSPECTOR CERTIFICATIONS

California Certified Asbestos Consultant (CAC)

Card Holder: <u>Michelle Ehresman</u>

Certification Number: <u>14-5323</u> Exp.: <u>11/19/2024</u>

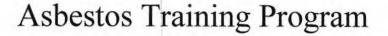
Current Employer: MTGL, Inc.

Supporting Certifications:

AHERA Contractor/Supervisor Refresher Certification
 AHERA Building Inspector Refresher Certification
 AHERA Management Planner Refresher Certification
 AHERA Project Designer Refresher Certification
 Exp. 7/27/2024
 Exp. 7/27/2024
 Exp. 8/16/2024



MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126 858-537-3999



This is to certify

Michelle Ehresman 1656

Has successfully completed 8 hours of formal training required by section 206 of TSCA II entitled

Contractor/Supervisor Refresher

Presented By
Environmental Compliance Training
PO BOX 16555
San Diego, CA. 92176-6555
(858) 558-7465

Director: Walter T. Amenta, CIH, Approval Number CA-029-04

Class Dates: 06-24-2023

Exam Date: n/a Expiration Date: 06-24-2024

Certification Number: 0623ABCA167303

Certificate Of Completion

Asbestos Building Inspector Refresher Course

DOSH #: CA-015-06

Michelle Ehresman

ABIR0727230010N35227

David Wallach

Principal Instructor

7/27/2023 Course Start Date 7/27/2023

Course End Date

Michael W. Horner
Training Director

7/27/2023

Exam Date

7/27/2024

Expiration Date

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



NATEC International, Inc.

National Association of Training and Environmental Consulting



TIONAL 1100 Technology Circle, Suite A, Anaheim, CA 92805 · www.natecintl.com · 800-969-3228

Important Industry Contacts

CAL-OSHA:

Ph# (916) 574-2993

(916) 483-0572 Fax Notification Web: www.dir.ca.gov or calosha.com

CDPH/CLPPB:Ph# (510) 620-5600

Web: www.cdph.ca.gov/programs/CLPPB

SCAQMD:

Ph# (909) 396-3739 Fax#(909) 396-3342

BAAOMD:

Ph# (415) 749-4762

NATEC International, Inc.

National Association of Training and Environmental Consulting

Asbestos · Lead · Mold · HAZWOPER

PO Box 8657, Fountain Valley, CA 92728 (714) 678-2750, (800) 969-3228, Fax (714) 678-2757 www.natecintl.com

NATEC International, Inc.

National Association of Training and Environmental Consulting
*Note: Card is not suitable substitute for certificate and is not accepted by SCAQMD as proof of
certification

This Card Acknowledges That

This Card Acknowledges That Michelle Ehresman

Holds Training Certification For Asbestos Building Inspector Refresher Course

Expiration: 7/27/2024

raining Date 7/27/20

Michael W. Horner

ABIR0727230010N35227 Training Director

Certificate Of Completion

Asbestos Project Designer Refresher Course

DOSH #:CA-015-10

Michelle Ehresman

APDR0816230004N35415

Norm Kramer

Principal Instructor

8/16/2023 Course Start Date 8/16/2023

Course End Date

8/16/2023

Exam Date

Michael W. Horner

Training Director

8/16/2024

Expiration Date

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



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National Association of Training and Environmental Consulting



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Important Industry Contacts

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SCAQMD:

Ph# (909) 396-3739 Fax#(909) 396-3342

BAAQMD:

Ph# (415) 749-4762

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*Note: Card is not suitable substitute for certificate and is not accepted by SCAQMD as proof of
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This Card Askinguidades That

This Card Acknowledges That Michelle Ehresman

Holds Training Certification For Asbestos Project Designer Refresher Course

Expiration: 8/16/2024

Training Date 8/16/2023 APDR0816230004N35415

Michael W. Horner Training Director

Certificate Of Completion

Asbestos Management Planner Refresher Course

DOSH #:CA-015-08

Michelle Ehresman

AMPR0727230007N35357

David Wallach

Principal Instructor

7/27/2023

Course Start Date

7/27/2023

Course End Date

7/27/2023

Exam Date

Training Director

Michael W. Horner

7/27/2024 **Expiration Date**

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



NATEC International, Inc.

National Association of Training and Environmental Consulting



1100 Technology Circle, Suite A, Anaheim, CA 92805 • www.natecintl.com • 800-969-3228

Important Industry Contacts

CAL-OSHA: Ph# (916) 574-2993

(916) 483-0572 Fax Notification

Web: www.dir.ca.gov or calosha.com

CDPH/CLPPB:Ph# (510) 620-5600

Web: www.cdph.ca.gov/programs/CLPPB

SCAQMD:

Ph# (909) 396-3739 Fax#(909) 396-3342

BAAQMD:

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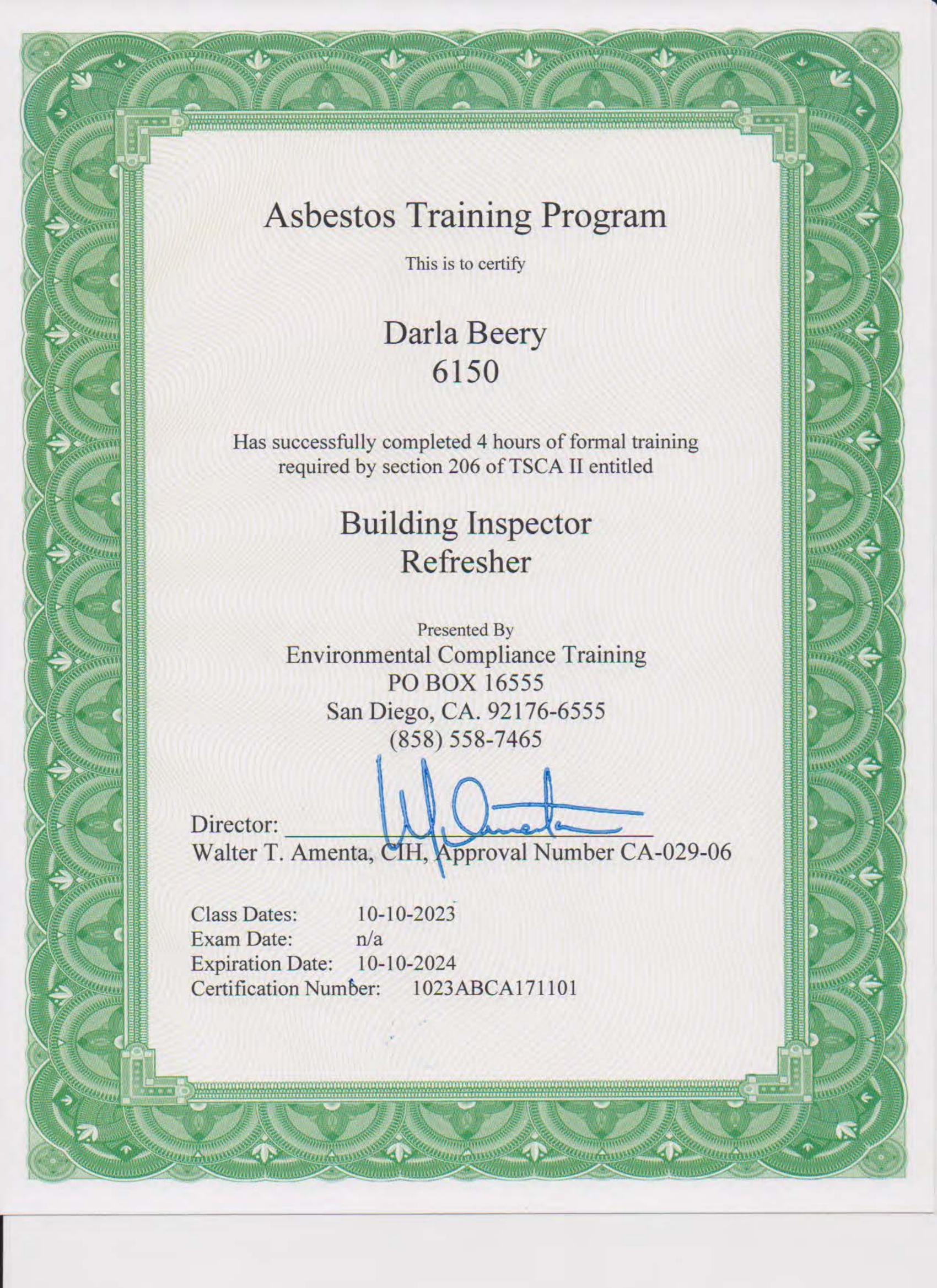
Expiration: 7/27/2024

7/27/2023 Training Date AMPR0727230007N35357

Certificate No.

Michael W. Homer Training Director

Darla Beery AHERA Building Inspector Certification



LEAD-BASED PAINT INSPECTION REPORT

Juvenile Hall-Building 7 331 The City Drive, S Orange, California 92868

Prepared for:

Vanir Construction 4540 Duckhorn Drive, Suite 300 Sacramento, California 95834

Prepared by:

MTGL, Inc. 7742 Arjons Drive San Diego, California 92126 858-537-3999

Project Number:

SDPE-24-061.1CT

Michelle Ehresman, CAC, LIA/LPM, ICRA Certification Number: CDPH# 0458/0459

Report Issuance Date: April 27, 2024

TABLE OF CONTENTS

SECTION

INTRODUCTION	
General Information	
Authorization Performance	
Terrormance	
WARRANTY	•••••
METHODOLOGY	
General References	
Lead Sampling Procedures Performance Characteristic Sheets	
renormance Characteristic Sheets	
SUMMARY of FINDINGS	
Lead-Based Paint Summary	
HAZARD CONTROL AND ABATEMENT OPTIONS & LEAD SAFE WORK PRACTICES	
LEAD BASED PAINT DISCLOSURE	
APPENDICES	
Appendix 1 –XRF Data Report and Performance Characteristic Sheet	
Appendix 2 – Site Drawing	
Appendix 3 – Glossary	
Appendix 4 – Inspector Certification	
Appendix 5 – CDPH 8552 Form	
Appendix 6 – Renovate Right	

GENERAL INFORMATION

MTGL was retained by Vanir Construction to conduct a lead-based paint inspection at the subject property located at 331 The City Drive in Orange, California 92868. All inspections were in accordance with the guidelines set forth in the U.S. Department of Housing and Urban Development. This document is prepared for the sole use of Vanir Construction and/or any Regulatory or Governmental agencies that may directly become involved with this project.

MTGL's scope of work was limited to the following Client specified locations at the property:

• Building 7 (Single story, wood frame with concrete and brick on a concrete slab.)

PURPOSE

The purpose of this inspection is to identify and assess painted components at the subject location above specified regulatory action levels within the Client specified scope of work.

AUTHORIZATION

Authorization to perform the survey was given by Mr. Scott Battles with a notice to proceed via proposal SDPE-24-061.1CT.

PERFORMANCE

All visual inspections and component testing was performed in accordance with Federal, State and local requirements. The inspection was performed by Michelle Ehresman, a California Certified Lead Inspector/Assessor on March 28, 2024.

LEAD-BASED PAINT SURVEY

MTGL, Inc. warrants that the findings contained herein have been prepared with the level of care and skill exercised by experienced and knowledgeable environmental consultants who are appropriately licensed or otherwise trained to perform lead-based paint assessments pursuant to the scope of work required on this project.

MTGL, Inc. warrants that the findings contained herein have been prepared in general accordance with accepted professional practices as applied by similar professionals in the community at the time of its preparation. Changes in the state of the art or in applicable regulations cannot be anticipated and have not been addressed in this report.

The survey included the inspection of accessible materials only. MTGL did not inspect or sample inaccessible areas such as behind walls or within ductwork and did not dismantle any part of the structure to survey inaccessible areas. For the purpose of this warranty, inaccessible is defined as areas of the building that could not be tested (sampled) without destruction of the structure or a portion of the structure. Inaccessible materials that are visible to MTGL inspectors shall be assumed to be lead-based paint coated.

It is the owner's legal obligation to disclose the inspection results to tenants and/or purchasers before obligation under 24 CFR part 35 and 40 CFR part 745 (published in the Federal Register, Volume 61, Number 45, March 6, 1996, starting on P. 9064; copies of the regulations and related materials can be obtained from the National Lead Information Center Clearinghouse, (1-800-424-LEAD)

GENERAL REFERENCES

LEAD-BASED PAINT

Lead-based paint testing was conducted in accordance with the Title 17, California Code of Regulations, Division 1, Chapter 8, Accreditation, Certification and Work Practices in Lead-Related Construction, Section 36000 and the United States Department of Housing and Urban Developments *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, Chapter 7 Lead-Based Paint Inspections*, as published in June 1995 and revised in 1997.

The State of California, HUD and the EPA currently define lead-based paint as paints or other surface coatings, which contain lead equal to or greater than 1.0 milligrams of lead per square centimeter of surface area (mg/cm²), or equal to or greater than 0.5% by weight.

Lead-based paint testing was conducted using portable x-ray fluorescence (XRF) spectrum analyzer, Model Niton XLP 300, Manufactured by Niton, Inc. The Niton XLP 300 is calibrated to measure the K-shell x-ray emissions of lead. The K-shell is normally used for paint analysis because it measures lead in all layers of paint films, including the lower layers where higher concentrations of lead are usually found. An initial calibration and ending calibration is validated each day with a laminated Lead Paint Standards testing card which is provided by the manufacturer. The card is a direct comparison to the paint standard to NIST kit SRM2579a with a spectrum analyzer. If an instrument does not maintain consistent calibrations after following the manufacturer's recommendation, the unit is removed from the site and sent back to the manufacturer for service.

In the instance where paint chip samples are collected, sample collections are conducted by the requirements of the American Society of Testing and Materials standard E 1729, Standard Practice for Field Collection of Dried Paint Samples for Lead Determination by Atomic Spectrometry Techniques and HUD Guidelines.

Performance Characteristic Sheet (PCS)

Performance Characteristic Sheets for most XRF models can be found on the U.S. Department of Housing and Urban Developments Office of Healthy Homes and Lead Hazard Control website, specifically HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.(http://www.hud.gov/offices/lead/lbp/hudguidelines/index.cfm). Operating specification and procedures for the XRF used for this survey can be downloaded at the website above. PCS's can also be obtained by calling toll free to the National Lead Information Clearinghouse, at 800-424-LEAD. Persons with hearing or speech impediments may access the above number via TTY by calling the Federal Information Relay Service at 800-887-8339, toll free.

GENERAL SUMMARY

Lead-Based Paint Inspection Results

The purpose of the lead-based paint survey was to evaluate the referenced facility's painted components that may contain lead-based paint. Suspect components identified during the survey included but not limited to the following:

- Interior: Door and Window Components, Wall, Floor and Ceilings
- Exterior: Wall, Windows and Doors

The following is a summary of lead based painted components identified that contain lead greater than 1.0 mg/cm² or greater * (Please see attachment I for a detail report of findings.)

- No lead-based paint was identified in the components tested.
- Intact lead containing green and yello ceramic wall was identified in the staff restrooms.

*MTGL, Inc. is not responsible for actual quantity of the material(s). MTGL recommends bidding contractors to calculate quantities for estimated abatement costs. When evaluating this report, it is assumed that according to Chapter 7 HUD guidelines, that if one testing combination (i.e. window, door) is positive for lead in an interior or exterior room equivalent, that all other similar testing combinations in those areas are assumed to be positive.

Deteriorated lead-based paint was not identified on the accessible components tested however, lead containing green and yellow, ceramic wall tile was identified and Title 8, CCR Section 1532.1 will apply.

When evaluating this report, it is assumed that according to Chapter 7 HUD guidelines, that if one testing combination (i.e. window, door) is positive for lead in an interior or exterior room equivalent, that all other similar testing combinations in those areas are assumed to be positive.

Current EPA and Cal/EPA regulations do not require lead-based paint to be removed prior to demolition, unless found to be loose and peeling. Provided that paints are securely adhered to the substrates, deposal of the debris can be handled in California as non-hazardous and non-RCRA waste, pending characterization of the waste.

Loose and peeling paints or other wastes exceeding the Total Threshold Level Concentration (TTLC) of 1,000 ppm ($\mu g/g$) would be required to be disposed of as non-RCRA hazardous waste. However, if the leachable lead contents of the wasted exceed the Soluble Threshold Level Concentrations (STLC) of 5 mg/liter, the wastes must be disposed of as RCRA waste.

Several government agencies have definitions for what amount of lead constitutes paint to be considered "lead-based". The Department of Housing and Urban Development (HUD) has designated the amount to be 1.0 mg/cm^{2,} 0.5% by weight or 5000 ppm (parts per million). The HUD regulations are related to potential hazards in the home environment and not to construction activities. The amount designated for high contact play areas is 400 ppm.

Lead Safe Work Practice Requirements for Maintenance, Renovation or Remodeling

EPA's RRP Rule requires anyone (remodeling, renovation and painting contractors and most other trades) who works in pre-1978 housing for compensation and who might disturb painted surfaces to become an EPA Certified Renovator by taking an 8-hour RRP "Lead Safe Work Practices" class from an EPA accredited training provider. The initial certification is good for five (5) years. To "renew" contractors must take a 4-hour RRP Refresher class before their initial certification expires. The RRP rule applies to anyone who works for compensation in pre-1978 housing and/or child-occupied facilities who might disturb painted surfaces, including:

- General contractors
- Demolition workers
- Remodeling contractors
- Maintenance workers in multi-family housing
- Painters, plumbers and most specialty trades.

The RRP rule covers a lot of jobs: renovation, remodeling, painting, window replacement, plumbing, electrical work, heating & air-conditioning, demolition, plus work performed by trades like carpenters, electricians and handymen. The rule also applies to persons working for rental property owners, schools, and day care providers. And, it applies to non-profits and governmental agencies. The RRP Rule requires that "Lead Safe Work Practices" be used when disturbing more than 6 square feet per room or 20 square feet outside.

It shall be noted that California's lead-based paint regulations cover ALL pre-78 structures that have not been tested - not just Target Housing and Child-Occupied Facilities. (Title 17, CCR, Div 1, Ch 8). Since 2003, California law (Title 17) has required that "Lead Safe Work Practices" be used in ALL pre-1978 structures when disturbing any amount of known or "presumed" lead-based paint. Contractors may have taken additional training to meet State of California requirements for Lead-Related Construction and obtain the required California Department of Public Health-Lead Related Construction Certifications for permanent abatement. This certification supplements but does not replace the EPA RRP certification. CDPH State Certified Lead Abatement Supervisors and Workers must also become RRP certified, and abatement firms must also be RRP Certified if they do non-abatement jobs.

Contractors and renovators who work or compensation in pre-1978 housing and/or a child-occupied facility that will disturb painted surfaces greater than 6 square feet per room or 20 square feet outside must give Clients a pamphlet called "Renovate Right" and get a signed receipt before beginning a job. Contractors can call (800) 424-5323 and ask for free copies of

"Renovate Right" and the "Small Entity Compliance Guide to Renovate Right" or both can be downloaded as PDF files from the EPA website.

The Consumer Product Safety Commission (CPSC) has defined lead-based paint as surface coatings containing lead concentrations greater than 90 ppm. All children's products, and some furniture, for adult and children, must not contain a concentration of lead greater than 0.009 percent (90 parts per million) in paint or any similar surface coatings. Household paint must also meet this requirement. In 1978, the CPSC banned the sale of lead-based paint to consumers and the use of lead-based paint in residences and public buildings.

Please note that the detection of any amount of lead in a component will trigger numerous requirements from the California Occupations Safety and Health Administration (Cal-OSHA) lead in construction standard (e.g., Title 8, CCR Section 1532.1), even with common tasks such as drywall demolition, manual paint scraping, and manual paint sanding. The employer is required to conduct air sampling to determine the exposure to lead during these tasks and during other tasks that could result in lead exposure. Until actual exposures are determined, workers are required to wear respirators that are appropriate to the task. Detailed requirements are published in the Cal-OSHA standard for lead in construction.

All workers who may be exposed to lead must be trained in the hazards of lead. The results of air sampling are used to determine if workers are exposed to lead above the action level (AL) of 30 micrograms per cubic meter of air or above the permissible exposure limit (PEL) of 50 micrograms of lead per cubic meter of air, averaged over an 8-hour shift. Exposures above the AL or PEL will trigger additional requirements including engineering controls, proper housekeeping, washing facilities for hand and face washing, additional worker training, respiratory protection, medical monitoring, and additional air sampling. The employer must have a written compliance plan.

Lead Paint

Interim controls which are temporary measures may include the following:

- Paint Film Stabilization: "scrape off the loose and flakey paint and reapply with regular house paint".
- Friction (places that rub) and Impact (places that are bumped or banged) Surface Treatments (Doors, windows, cabinets, floors, etc): treated by covering the surfaces with an abrasion-resistant material, or by repairing to an intact working condition in order to minimize dust.
- Special Cleaning: reduction of lead hazard by cleaning up visible dust by HEPA vacuuming, washing and HEPA vacuuming again.

Interim controls typically last less than 20 years and will require the reevaluation of components on a periodic basis.

As of April 22, 2010, the EPA passed the Renovator, Repair and Paint Rule (RRP) (40 CFR Part 745.90) which states all renovation and painting contractors and other trades who work in pre-1978 housing and who might disturb painted surfaces must become Lead Certified Renovators by taking a one-day course about using "Lead Safe Work Practices" on the job.

Abatement methods which eliminate or put a barrier in front of lead hazards may include the following:

- Encapsulation: covering lead paint with a special liquid or thick coating (not regular paint). Works well on surfaces that are in good condition and should not be used on friction or impact surfaces.
- Enclosure: covering lead paint with a solid, dust-tight barrier that is usually mechanically attached (sheetrock, paneling, drywall).
- Replacement: removal of lead covered components (doors, windows, molding) and replacing with lead free components.
- Removal: recommended when other options may not be feasible; removal of lead paint by means of heat guns, scraping and sanding, power tools, chemical stripping and/or use of abrasives and hydro blasting.

Abatement controls typically last more than 20 years. Abatement methods that will result in the smallest amount of dust generated are preferred. Workers who partake in the above abatement methods should be California State Certified Lead Supervisors and Workers. Clearance sampling after abatement must be conducted by a certified lead-based paint inspector

Lead Safe Work Practice Requirements for Maintenance, Renovation or Remodeling

Lead-based paint, deteriorated paint or lead-based hazards require lead safe work practices. These practices are necessary for regular lead based paint hazard controls, repair, remodeling, renovation or other work activities that may disturb lead based paint above HUD's de minimis levels. HUD describes de minimus levels as follows:

- 20 square feet on exterior surfaces
- 2 square feet in any one interior room or space
- 10% of a type of building component with a small surface area (such as painted windowsills) on interior or exterior surfaces

Workers who may disturb lead-based paint above the de minimis level during repair, renovation or maintenance activities or any other work efforts that disturbs a known or assumed lead-based paint above HUD's de minimis shall be trained in lead safe work practices.

Firms providing abatement services must be certified as an abatement firm by the EPA or the State. Workers conducting abatement must be trained and certified as abatement workers by a training provider accredited by the EPA or State.

SECTION 6 DISCLOSURE

A copy of this summary must be provided to new lessees (tenants) and purchasers of this property under Federal Law (24 CFR part 35 and 40 CFR part 745) before they become obligated under a lease or sales contract. The complete report must also be provided to new purchasers and it must be made available to new tenants. Landlords (lessors) and sellers are also required to distribute an educational pamphlet and include standard warning language in their leases or sales contracts to ensure that parents have the information they need to protect their children from lead-based paint hazards.

It is the owner's legal obligation to disclose the inspection results to tenants and/or purchasers before obligation under 24 CFR part 35 and 40 CFR part 745 (published in the Federal Register, Volume 61, Number 45, March 6, 1996, starting on P. 9064; copies of the regulations and related materials can be obtained from the National Lead Information Center Clearinghouse, (1-800-424-LEAD).

SECTION 7 Appendices

Appendix 1

XRF Data Sheet

and

Performance Characteristic Sheet (PCS)

Project: Vanir- Juvenile Hall-Building 7, 331 The City Drive, Orange, CA 92868

Inspection Date: March 28, 2024

(EPA Regulated Lead-Based Paint= 1.0 mg/cm²)

(<LOD= Below Limit of Detection)

,					Comp	onent					
Sample #	Unit	Side	Location	Test Location	Structure	Member	Paint Condition	Substrate	Color	XRF Reading (mg/cm2)	Classification (pos, neg, inc.)
1			Calibration						Red NIST	1.0	
2			Calibration						Red NIST	1.0	
3			Calibration						Red NIST	1.0	
4	B7-A	A	Common Rm	Door	Door		Intact	Metal	Blue	0.06	Negative
5	B7-A	A	Common Rm	Door	Frame		Intact	Metal	Blue	0.08	Negative
6	B7-A	A	Common Rm	Wall			Intact	Concrete	White	0.04	Negative
7	B7-A	В	Common Rm	Wall			Intact	Concrete	White	0.02	Negative
8	B7-A	C	Common Rm	Wall			Intact	Concrete	White	0.07	Negative
9	B7-A	D	Common Rm	Wall			Intact	Concrete	White	0.1	Negative
10	B7-A	A	Common Rm	Floor			Intact	Concrete	Brown	0.06	Negative
11	B7-A	A	Common Rm	Window	Frame		Intact	Metal	Black	0.12	Negative
12	B7-A	D	Break Room	Door	Frame		Intact	Metal	Blue	0.05	Negative
13	B7-A	В	Break Room	Wall	Cabinet	Door	Fair	Wood	White	<lod< td=""><td>Negative</td></lod<>	Negative
14	B7-A	В	Break Room	Wall	Cabinet	Casing	Fair	Wood	White	<lod< td=""><td>Negative</td></lod<>	Negative
15	B7-A	A	Break Room	Window 1	Frame		Intact	Metal	White	<lod< td=""><td>Negative</td></lod<>	Negative
16	B7-A	С	Break Room	Wall			Intact	Concrete	White	<lod< td=""><td>Negative</td></lod<>	Negative
17	B7-A	D	Break Room	Wall			Intact	Concrete	White	<lod< td=""><td>Negative</td></lod<>	Negative
18	B7-A	D	Break Room	Ceiling	HVAC	Vent	Intact	Metal	White	<lod< td=""><td>Negative</td></lod<>	Negative
19	B7-A	C	Break Room	Wall	Pipe		Intact	Metal	White	0.22	Negative
20	В7-А	С	Bathroom	Door			Fair	Metal	Blue	0.08	Negative
21	B7-A	С	Bathroom	Door	Frame		Fair	Metal	Blue	0.11	Negative
22	B7-A	С	Bathroom	Wall	Tile		Intact	Ceramic	White	<lod< td=""><td>Negative</td></lod<>	Negative
23	B7-A	С	Bathroom	Wall	Floor	Tile	Intact	Ceramic	White	<lod< td=""><td>Negative</td></lod<>	Negative

Project: Vanir- Juvenile Hall-Building 7, 331 The City Drive, Orange, CA 92868

Inspection Date: March 28, 2024

(EPA Regulated Lead-Based Paint= 1.0 mg/cm²) ((<LOD= Below Limit of Detection)

					Comp	onent					
Sample #	Unit	Side	Location	Test Location	Structure	Member	Paint Condition	Substrate	Color	XRF Reading (mg/cm2)	Classification (pos, neg, inc.)
24	B7-A	C	Bathroom	Window	Frame		Intact	Metal	Blue	0.02	Negative
25	B7-A	C	Bathroom	Window	Sill		Intact	Metal	Blue	0.06	Negative
26	B7-A	C	Linen Room	Door			Fair	Metal	Tan	0.17	Negative
27	B7-A	C	Linen Room	Door	Frame		Fair	Metal	Blue	0.20	Negative
28	B7-A	D	Linen Room	Door			Fair	Metal	Tan	0.08	Negative
29	B7-A	D	Linen Room	Door	Frame		Fair	Metal	Blue	0.22	Negative
30	B7-A	D	Linen Room	Wall			Poor	Concrete	White	0.04	Negative
31	B7-A	A	Hallway	Wall			Intact	Concrete	White	0.04	Negative
32	B7-A	C	Hallway	Wall			Intact	Concrete	White	0.01	Negative
33	B7-A	C	Hallway	Ceiling			Intact	Concrete	White	0.09	Negative
34	B7-A	С	Hallway	Bench			Poor	Wood	Blue	<lod< td=""><td>Negative</td></lod<>	Negative
35	B7-A	С	Hallway	Bench	Support		Poor	Metal	Blue	<lod< td=""><td>Negative</td></lod<>	Negative
36	B7-A	С	Room 1	Door			Intact	Metal	Blue	<lod< td=""><td>Negative</td></lod<>	Negative
37	B7-A	С	Room 1	Door	Frame		Intact	Metal	Blue	0.5	Negative
38	B7-A	В	Room 1	Wall			Intact	Concrete	White	0.19	Negative
39	B7-A	A	Room 1	Window	Screen	Frame	Intact	Metal	White	0.11	Negative
40	B7-A	С	Room 5	Door			Intact	Metal	Blue	<lod< td=""><td>Negative</td></lod<>	Negative
41	B7-A	C	Room 5	Door	Frame		Intact	Metal	Blue	0.3	Negative
42	B7-A	A	Room 5	Wall			Intact	Concrete	White	0.13	Negative
43	B7-A	A	Room 5	Window	Screen	Frame	Intact	Metal	White	0.16	Negative
44	B7-A	C	Room 20	Door			Intact	Metal	Blue	<lod< td=""><td>Negative</td></lod<>	Negative
45	B7-A	C	Room 20	Door	Frame		Intact	Metal	Blue	0.5	Negative
46	B7-A	C	Room 20	Wall			Intact	Concrete	White	0.11	Negative

Project: Vanir- Juvenile Hall-Building 7, 331 The City Drive, Orange, CA 92868

Inspection Date: March 28, 2024

(EPA Regulated Lead-Based Paint= 1.0 mg/cm²)

(County of Los Angeles= 0.7mg/cm²) (<LOD= Below Limit of Detection)

Ì					Comp	onent					
Sample #	Unit	Side	Location	Test Location	Structure	Member	Paint Condition	Substrate	Color	XRF Reading (mg/cm2)	Classification (pos, neg, inc.)
47	B7-A	A	Room 20	Window	Screen	Frame	Intact	Metal	White	0.09	Negative
48	B7-A	C	Hallway	Pipe Chase	Door		Intact	Metal	Blue	0.15	Negative
49	B7-A	C	Hallway	Pipe Chase	Door	Frame	Intact	Metal	Blue	0.30	Negative
50	B7-A	A	Mop Closet	Door			Intact	Metal	Blue	0.17	Negative
51	B7-A	Α	Mop Closet	Door	Frame		Intact	Metal	Blue	0.21	Negative
52	B7-A		Mop Closet	Wall	Sink		Poor	Porcelain	White	7.5	Positive
53	B7-A	A	Staff Restroom	Door			Fair	Metal	Purple	. <lod< td=""><td>Negative</td></lod<>	Negative
54	B7-A	A	Staff Restroom	Door	Frame		Fair	Metal	Purple	0.10	Negative
55	B7-A	C	Staff Restroom	Wall	Tile		Intact	Ceramic	Green	6.5	Positive
56	B7-A	С	Staff Restroom	Floor	Tile		Intact	Ceramic	Green	<lod< td=""><td>Negative</td></lod<>	Negative
57	B7-I	A	Staff Restroom	Door			Fair	Metal	Grey	<lod< td=""><td>Negative</td></lod<>	Negative
58	B7-I	A	Staff Restroom	Door	Frame		Fair	Metal	Grey	0.12	Negative
59	B7-I	C	Staff Restroom	Wall	Tile		Intact	Ceramic	Green	4.1	Positive
60	B7-I	С	Staff Restroom	Floor	Tile		Intact	Ceramic	Green	<lod< td=""><td>Negative</td></lod<>	Negative
61	B7-I	A	Room 3	Door			Intact	Metal	Grey	<lod< td=""><td>Negative</td></lod<>	Negative
62	B7-I	A	Room 3	Door	Frame		Intact	Metal	Grey	0.5	Negative
63	B7-I	В	Room 3	Wall			Intact	Concrete	White	0.04	Negative
64	B7-I	С	Room 3	Window	Screen	Frame	Intact	Metal	White	0.07	Negative
65	B7-I	A	Hallway	Wall	Firebox		Intact	Metal	Red	0.04	Metal
66	B7-I	C	Staff Restroom	Wall	Tile		Intact	Ceramic	Yellow	6.1	Positive
67	B7-I	C	Staff Restroom	Floor	Tile		Intact	Ceramic	Yellow	<lod< td=""><td>Negative</td></lod<>	Negative
68	В7	A	Exterior	Wall, L			Intact	Brick	Red	<lod< td=""><td>Negative</td></lod<>	Negative
69	B-7	A	Exterior	Window 1	Frame		Intact	Metal	Brown	<lod< td=""><td>Negative</td></lod<>	Negative

Project: Vanir- Juvenile Hall-Building 7, 331 The City Drive, Orange, CA 92868

Inspection Date: March 28, 2024

(EPA Regulated Lead-Based Paint= 1.0 mg/cm²)

(County of Los Angeles= 0.7mg/cm²) (<LOD= Below Limit of Detection)

~ -					Comp	difelit					
Sample #	Unit	Side	Location	Test Location	Structure	Member	Paint Condition	Substrate	Color	XRF Reading (mg/cm2)	Classification (pos, neg, inc.)
70	B-7	A	Exterior	Wall	Overhang		Intact	Concrete	White	<lod< td=""><td>Negative</td></lod<>	Negative
71	B-7	A	Exterior	Wall, C			Intact	Concrete	White	<lod< td=""><td>Negative</td></lod<>	Negative
72	B-7	A	Exterior	Window 11	Frame		Intact	Metal	Green	0.19	Negative
73	B-7	A	Exterior	Window 11	Sill		Intact	Concrete	White	<lod< td=""><td>Negative</td></lod<>	Negative
74	B-7	C	Ext. Mech Rm	Door			Intact	Metal	Grey	0.02	Negative
75	B-7	C	Ext. Mech Rm	Door	Frame		Intact	Metal	Grey	0.03	Negative
76	B-7	C	Ext. Mech Rm	Wall, L			Intact	Concrete	White	<lod< td=""><td>Negative</td></lod<>	Negative
77	B-7	C	Exterior	Wall, C			Intact	Brick	Red	<lod< td=""><td>Negative</td></lod<>	Negative
78	B-7	C	Exterior	Window	Frame		Intact	Metal	Green	<lod< td=""><td>Negative</td></lod<>	Negative
79	B-7	C	Exterior	Window	Sill		Intact	Metal	Brown	<lod< td=""><td>Negative</td></lod<>	Negative
80	B-7	C	Exterior	Shed			Poor	Wood	Green	<lod< td=""><td>Negative</td></lod<>	Negative
81	B-7	C	Exterior	Door 3	Door		Intact	Metal	Green	0.03	Negative
82	B-7	C	Exterior	Door 3	Door	Frame	Intact	Metal	Green	< 0.06	Negative
83	B-7	C	Exterior	Wall, R	Vent		Intact	Metal	Green	<lod< td=""><td>Negative</td></lod<>	Negative
84	B-7	C	Exterior	Wall	Up Trim		Intact	Metal	Frey	<lod< td=""><td>Negative</td></lod<>	Negative
85	B-7		Calibration						Red NIST	1.0	Calibration

Performance Characteristic Sheet

EFFECTIVE DATE: September 24, 2004 EDITION NO.: 1

MANUFACTURER AND MODEL:

Make: Niton LLC
Tested Model: XLp 300
Source: 109Cd

Note: This PCS is also applicable to the equivalent model variations indicated

below, for the Lead-in-Paint K+L variable reading time mode, in the XLi and

XLp series:

XLi 300A, XLi 301A, XLi 302A and XLi 303A. XLp 300A, XLp 301A, XLp 302A and XLp 303A. XLi 700A, XLi 701A, XLi 702A and XLi 703A. XLp 700A, XLp 701A, XLp 702A, and XLp 703A.

Note: The XLi and XLp versions refer to the shape of the handle part of the instrument. The differences in the model numbers reflect other modes available, in addition to Lead-in-Paint modes. The manufacturer states that specifications for these instruments are identical for the source, detector, and detector electronics relative to the Lead-in-Paint mode.

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

Lead-in-Paint K+L variable reading time mode.

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm² (inclusive)

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm² in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm² film).

If readings are outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instruments into control before XRF testing proceeds.

SUBSTRATE CORRECTION:

For XRF results using Lead-in-Paint K+L variable reading time mode, substrate correction is <u>not</u> needed for: Brick, Concrete, Drywall, Metal, Plaster, and Wood

INCONCLUSIVE RANGE OR THRESHOLD:

K+L MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm²)
Results not corrected for substrate bias on any	Brick	1.0
substrate	Concrete	1.0
	Drywall	1.0
	Metal	1.0
	Plaster	1.0
	Wood	1.0

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* ("HUD Guidelines"). Performance parameters shown on this sheet are calculated from the EPA/HUD evaluation using archived building components. Testing was conducted in August 2004 on 133 testing combinations. The instruments that were used to perform the testing had new sources; one instrument's was installed in November 2003 with 40 mCi initial strength, and the other's was installed June 2004 with 40 mCi initial strength.

OPERATING PARAMETERS:

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

SUBSTRATE CORRECTION VALUE COMPUTATION:

Substrate correction is not needed for brick, concrete, drywall, metal, plaster or wood when using Lead-in-Paint K+L variable reading time mode, the normal operating mode for these instruments. If substrate correction is desired, refer to Chapter 7 of the HUD Guidelines for guidance on correcting XRF results for substrate bias.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing. Use the K+L variable time mode readings.

Conduct XRF retesting at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below.

Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family housing a result is defined as the average of three readings. In multifamily housing, a result is a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF results.

Compute the average of all ten re-test XRF results.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

TESTING TIMES:

For the Lead-in-Paint K+L variable reading time mode, the instrument continues to read until it is moved away from the testing surface, terminated by the user, or the instrument software indicates the reading is complete. The following table provides testing time information for this testing mode. The times have been adjusted for source decay, normalized to the initial source strengths as noted above. Source strength and type of substrate will affect actual testing times. At the time of testing, the instruments had source strengths of 26.6 and 36.6 mCi.

Testing Times Using K+L Reading Mode (Seconds)										
		All Data		Median for laboratory-measured lead levels (mg/cm²)						
Substrate	25 th Percentile	Median	75 th Percentile	Pb < 0.25	0.25 <u><</u> Pb<1.0	1.0 <u><</u> Pb				
Wood Drywall	4	11	19	11	15	11				
Metal	4	12	18	9	12	14				
Brick Concrete Plaster	8	16	22	15	18	16				

CLASSIFICATION RESULTS:

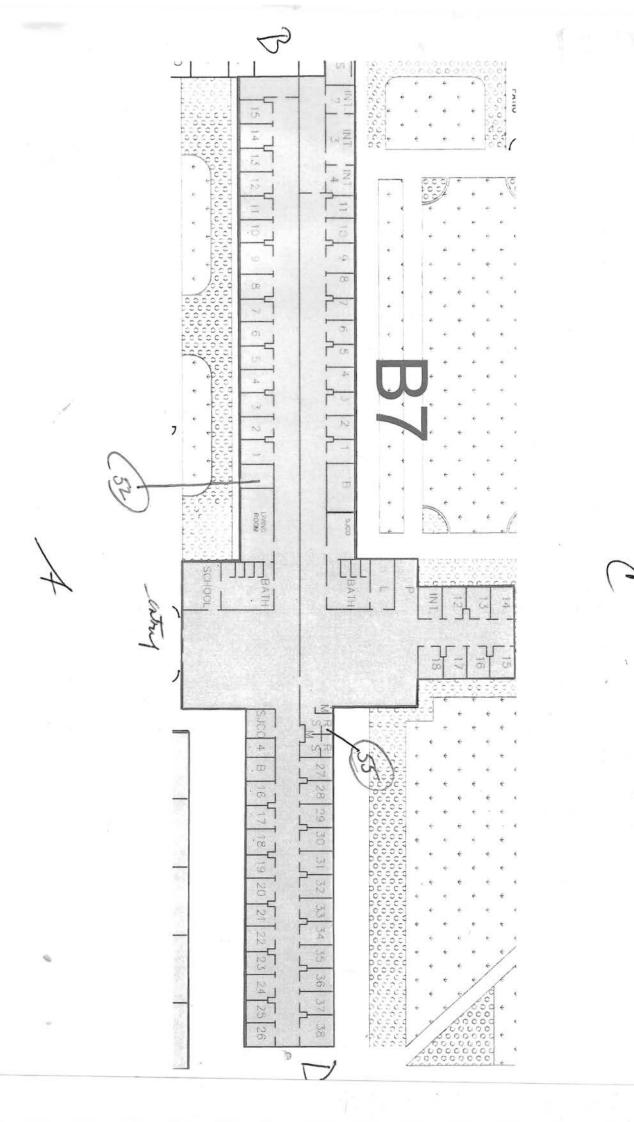
XRF results are classified as positive if they are greater than or equal to the threshold, and negative if they are less than the threshold.

DOCUMENTATION:

A document titled *Methodology for XRF Performance Characteristic Sheets* provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. For a copy of this document call the National Lead Information Center Clearinghouse at 1-800-424-LEAD.

This XRF Performance Characteristic Sheet was developed by the Midwest Research Institute (MRI) and QuanTech, Inc., under a contract between MRI and the XRF manufacturer. HUD has determined that the information provided here is acceptable when used as guidance in conjunction with Chapter 7, Lead-Based Paint Inspection, of HUD's *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*.

APPENDIX 2 SITE DRAWING



Appendix 3

Glossary

LEAD HAZARD EVALUATION REPORT

Section 1 — Date of Lead Hazard Evalua	ation $\frac{3/2}{28}$				
Section 2 — Type of Lead Hazard Evalu	ation (Check	one box only)			
✓ Lead Inspection Risk assessm	ent Cl	earance Inspection	Other (specify)		
Section 3 — Structure Where Lead Haza	rd Evaluation	n Was Conducted			
Address [number, street, apartment (if applicable	e)]	City	County		Zip Code
331 The City Drive (Building 7)	Orange	Orange	9	92868	
Construction date (year) Type of structure				ving in structure?	
Linknown	it building amily dwelling	School or daycare Other	Ye	s 🔽 No n't Know	
Section 4 — Owner of Structure (if busing	ness/agency,	list contact person)			-9
Name			Telephone num	ber	
c/o Vanir Contruction (Scott Bat	iles)		916-677-7	024	
Address [number, street, apartment (if applicabl	e)]	City	State		Zip Code
4540 Duckhorn Drive, Suite 300		Sacramento	CA		95834
Section 5 — Results of Lead Hazard Eva	aluation (ched	ck all that apply)	**		- 10
 ✓ No lead-based paint detected No lead hazards detected 	Intact lead	l-based paint detected	Deter		sed paint detected
Section 6 — Individual Conducting Lead	Hazard Eval	uation	tile		
Name			Telephone nun	nber	
Michelle Ehresman			858-537-	3999	
Address [number, street, apartment (if applicabl	e)]	City	State		Zip Code
7742 Arjons Drive		San Diego	CA		92126
CDPH certification number	Sig	gnature			Date
LRC 0459		Michelle	A.		4/27/24
Name and CDPH certification number of any oth	er individuals co	onducting sampling or testing	(if applicable)		
Section 7 — Attachments					
A. A foundation diagram or sketch of the st lead-based paint; B. Each testing method, device, and samp C. All data collected, including quality contri	ing procedure	used;		·	
First copy and attachments retained by inspecto	r	Third copy only (no a	attachments) ma	iled or faxed to:	
Second copy and attachments retained by owner	Childhood Lead Pois 850 Marina Bay Park	California Department of Public Health Childhood Lead Poisoning Prevention Branch Reports 850 Marina Bay Parkway, Building P, Third Floor Richmond, CA 94804-6403 Fax: (510) 620-5656			

Appendix 4

Inspector Certification



STATE OF CALIFORNIA DEPARTMENT OF PUBLIC HEALTH



LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:

CERTIFICATE TYPE:

NUMBER:

EXPIRATION DATE:

Lead Inspector/Assessor

LRC-00000459

5/31/2025

Lead Project Monitor

LRC-00000458

5/31/2025

Michelle Ehresman

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD

Appendix 5

CDPH 8552 Inspection Form





Glossary

AALA: American Association for Laboratory Accreditation. Also known as A2LA.

Abatement: A measure or set of measures designed to permanently eliminate lead-based paint hazards or lead-based paint. Abatement strategies include the removal of lead-based paint, enclosure, encapsulation, replacement of building components coated with lead-based paint, removal of lead-contaminated dust, and removal of lead-contaminated soil or overlaying of soil with a durable covering such as asphalt (grass and sod are considered interim control measures). All of these strategies require preparation; cleanup; waste disposal; postabatement clearance testing; recordkeeping; and, if applicable, monitoring. See also Complete abatement and Interim controls.

Abrasion resistance: Resistance of the paint to wear by rubbing or friction; related to both toughness and gloss.

Accessible surface: Any protruding interior or exterior surface, such as an interior window sill, that a young child can mouth or chew.

Accreditation: A formal recognition that an organization, such as a laboratory, is competent to carry out specific tasks or types of tests.

Accredited laboratory: A laboratory that has been evaluated and approved by the National Lead Laboratory Accreditation Program (NLLAP), to perform lead measurement or analysis, usually over a specified period of time.

Accredited training provider: A training provider who meets the standards established by EPA for the training of risk assessors, inspectors, lead-based paint hazard control contractors, and workers.

Accuracy: The degree of agreement between an observed value and an accepted reference value (a "true" value); a data quality indicator. Accuracy includes a combination of random errors (precision) and systematic errors (bias) due to sampling and analysis.

Acrylic: A synthetic resin used in highperformance waterborne coatings; a coating whose binder contains acrylic resins.

Adhesion: The ability of dry paint or other coating to attach to a surface and remain fixed on it without blistering, flaking, cracking, or being susceptible to removal by tape.

Administrative removal: The temporary removal of workers from the job to prevent the concentration of lead in their blood from reaching levels requiring medical removal.

AIHA: American Industrial Hygiene Association.

ALC: See Apparent Lead Concentration.

Aliquot: See Subsample.

Alkali: A chemical, such as lye, soda, lime, etc., that will neutralize an acid. Oil paint films can be destroyed by alkalies. Some paint removal products contain alkaline substances.

Alkyd: Synthetic resin modified with oil; coating that contains alkyd resins in the binder.

Apparent Lead Concentration (ALC): The x-ray fluorescence (XRF) reading or average of more than one reading on a *painted* surface. See also XRF analyzer, Substrate Equivalent Lead (SEL), and Corrected Lead Concentration (CLC).

Bare soil: Soil not covered with grass, sod, some other similar vegetation, or paving, including the sand in sandboxes.





Bias: A systematic error in the measurement process. For XRF readings, one source of bias is the substrate effect. See also Substrate effect and XRF analyzer.

Biennial report (for hazardous waste): A report (EPA Form 8700–13A) submitted by generators of hazardous waste to the EPA Regional Administrator. The report is due on March 1 of even-numbered years. The report includes information on the generator's activities during the previous calendar year. The owners and operators of treatment, storage, and disposal facilities must also prepare and submit biennial reports using EPA Form 8700–1313.

Binder: Solid ingredients in a coating that hold the pigment particles in suspension and bind them to the substrate. Binders used in paints and coatings include oil, alkyd, acrylic, latex, and epoxy. The nature and amount of binder determines many of the coating's performance properties—washability, toughness, adhesion, gloss, etc. See also Pigment.

Biological monitoring: The analysis of blood, urine, or both to determine the level of lead contamination in the body. Blood lead levels are expressed in micrograms of lead per deciliter (one-tenth of a liter) of blood, or $\mu g/dL$. They are also expressed in micromoles per liter ($\mu mol/L$).

Blank: A nonexposed sample of the medium being used for testing (i.e., wipe or filter) that is analyzed to determine if the medium has been contaminated with lead (e.g., at the factory or during transport).

Blind sample: A subsample submitted for analysis with a composition and identity known to the submitter but not to the analyst; used to test the analyst's or laboratory's proficiency in conducting measurements. See also Spiked sample.

Blood lead threshold: Any blood lead level greater than or equal to 10 μ g/dL as defined by the Centers for Disease Control and Prevention. See also Elevated Blood Lead level (EBL) child.

Building component: Any element of a building that may be painted or have dust on its surface, e.g. walls, stair treads, floors, railings, doors, window sills, etc.

Building component replacement: See Replacement.

Cementitious material: A material that is mixed with water, either with or without aggregate, to provide the plasticity, cohesion, and adhesion necessary for the placement and formation of a rigid mass (ASTM Standard C 11).

Centimeter: See cm.

Certification: The process of testing and evaluating against certain specifications the competence of a person, organization, or other entity in performing a function or service, usually for a specified period of time.

Certified: The designation for contractors who have completed training and other requirements to allow them to safely undertake risk assessments, inspections, or abatement work. Risk assessors, inspectors, and abatement contractors should be certified by the appropriate local, State or Federal agency.

Certified Industrial Hygienist (CIH): A person who has passed the 2-day certification exam of the American Board of Industrial Hygiene, and who has at least 4 years of experience in industrial hygiene and a graduate degree or a total of 5 years of experience. See also Industrial hygienist.

Certified reference material (CRM): Reference material that has at least one of its property values established by a technically valid procedure and is accompanied by or traceable to a certificate or other documentation issued by a certifying body. See also Standard reference material.

CFR: See Code of Federal Regulations.

Chalking: The photo-oxidation of paint binders—usually due to weathering—that causes a powder to form on the film surface.





Characteristics (of hazardous waste): EPA has identified four characteristics of hazardous waste: ignitability, corrosivity, reactivity, and toxicity (as determined by the TCLP test). Any solid waste that exhibits at least one of these characteristics may be classified as hazardous under the Resource Conservation and Recovery Act (RCRA), depending on how the waste is produced and what quantities are generated. See also Toxicity Characteristic Leaching Procedure (TCLP).

Chewable surface: See Chewed surface and Accessible surface.

Chewed surface: Any painted surface that shows evidence of having been chewed or mouthed by a young child. A chewed surface is usually a protruding, horizontal part of a building, such as an interior window sill. See also Accessible surface.

CLC: See Corrected Lead Concentration (CLC).

Cleaning: The process of using a HEPA vacuum and wet cleaning agents to remove leaded dust; the process includes the removal of bulk debris from the work area. OSHA prohibits the use of compressed air to clean lead-contaminated dust from a surface.

Clearance examination: Visual examination and collection of environmental samples by an inspector or risk assessor and analysis by an accredited laboratory upon completion of an abatement project, interim control intervention, or maintenance job that disturbs lead-based paint (or paint suspected of being lead-based). The clearance examination is performed to ensure that lead exposure levels do not exceed standards established by the EPA Administrator pursuant to Title IV of the Toxic Substances Control Act, and that any cleaning following such work adequately meets those standards.

Clearance examiner: A person who conducts clearance examinations following lead-based paint hazard control and cleanup work, usually a certified risk assessor or a certified inspector.

cm: Centimeter; 1/100 of a meter.

Code of Federal Regulations (CFR): The codification of the regulations of Federal agencies. The regulations are published in the Federal Register. See also Federal Register (FR).

Cohesion: Ability of a substance to adhere to itself; internal adhesion; the force holding a substance together.

Common area: A room or area that is accessible to all residents in a community (e.g., hallways or lobbies); in general, any area not kept locked.

Competent person: As defined in the OSHA Lead Construction Standard (29 CFR 1926.62), a person who is capable of identifying or predicting hazardous working conditions and work areas, and who has authorization to take prompt, corrective measures to eliminate the hazards. A competent person is not necessarily a risk assessor, inspector, or abatement project supervisor.

Complete abatement: Abatement of all lead-based paint inside and outside a dwelling or building and reduction of any lead-contaminated dust or soil hazards. All of these strategies require preparation; cleanup; waste disposal; postabatement clearance testing; recordkeeping; and, if applicable, reevaluation and on-going monitoring. See also Abatement.

Compliance plan: A document that describes the types of tasks, workers, protective measures, and tools and other materials that may be employed in lead-based paint hazard control to comply with the OSHA Lead Exposure in Construction standard.

Composite sample: A single sample made up of individual subsamples. Analysis of a composite sample produces the arithmetic mean of all subsamples.

Containment: A process to protect workers and the environment by controlling exposures to the lead-contaminated dust and debris created during abatement. See Worksite preparation level.





Contingency plan: A document that describes an organized, planned, and coordinated course of action to be taken during any event that threatens human health or the environment, such as a fire, explosion, or the release of hazardous waste or its constituents from a treatment, storage, or disposal facility.

Corrected Lead Concentration (CLC): The absolute difference between the Apparent Lead Concentration and the Substrate Equivalent Lead. See also Apparent Lead Concentration (ALC) and Substrate Equivalent Lead (SEL).

Detection limit: The minimum amount of a substance that can be reliably measured by a particular method.

Deteriorated lead-based paint: Any lead-based paint coating on a damaged or deteriorated surface or fixture, or any interior or exterior lead-based paint that is peeling, chipping, blistering, flaking, worn, chalking, alligatoring, cracking, or otherwise becoming separated from the substrate.

Digestion blank: A mixture of the reagents used for digesting of paint, soil, or dust matrixes but without the matrix. The blank undergoes all the steps of the analysis, starting with digestion. The blank is used to evaluate the contamination process from a laboratory.

Direct-reading XRF: An analyzer that provides the operator with a display of lead concentrations calculated from the lead K x ray intensity without a graphic of the spectrum usually in mg/cm² (milligrams of lead per square centimeter of painted surface area). See also XRF analyzer.

Disposal (of hazardous waste): The discharge, deposit, injection, dumping, spilling, leaking, or placement of solid or hazardous waste on land or in water so that none of its constituents can pollute the environment by being emitted into the air or discharged into a body of water, including groundwater.

Disposal facility: A facility or part of one in which hazardous waste is placed on land or in water to remain there after the facility closes.

Door mat: See Walk-off mat.

Dust removal: A form of interim control that involves initial cleaning followed by periodic monitoring and recleaning, as needed. Depending on the severity of lead-based paint hazards, dust removal may be the primary activity or just one element of a broader control effort.

Dust trap: A surface, component, or furnishing that serves as a reservoir where dust can accumulate.

EBL child: See Elevated Blood Lead level (EBL) child.

Efflorescence: The salt rising to the surface of a material, such as masonry, plaster, or cement, caused by the movement of water through the material. Paint or encapsulants may not adhere to a surface contaminated with efflorescence.

Elastomeric: A group of pliable, elastic liquid encapsulant coatings. An elastomer is a macromolecular material which, at room temperature, is capable of substantially recovering its size and shape after the force causing its deformation is removed (see ASTM D 907, D-14).

Elevated Blood Lead level (EBL) child: A child who has a blood lead level greater than or equal to 20 μg/dL or a persistent 15 μg/dL. See also Blood lead threshold.

Encapsulation: Any covering or coating that acts as a barrier between lead-based paint and the environment, the durability of which relies on adhesion and the integrity of the existing bonds between multiple layers of paint and between the paint and the substrate. See also Enclosure.

Enclosure: The use of rigid, durable construction materials that are mechanically fastened to the substrate to act as a barrier between the lead-based paint and the environment.





Engineering controls: Measures other than respiratory protection or administrative controls that are implemented at the work site to contain, control, and/or otherwise reduce exposure to lead-contaminated dust and debris usually in the occupational health setting. The measures include process and product substitution, isolation, and ventilation.

Epoxy paint: Paint based on an epoxy resin. An epoxy resin is a cross-linking resin the reactivity of which depends on the epoxide group.

Evaluation: Risk assessment, paint inspection, reevaluation, investigation, clearance examination, or risk assessment screen.

Examination: See Clearance examination.

Examiner: A person certified to conduct clearance examinations or reevaluations, usually a certified inspector or certified risk assessor.

Exposure monitoring: The sampling and analysis of air both inside and outside the work area to determine the degree of worker and resident exposure to lead or other airborne contaminants, often involving air sampling inside a worker's breathing zone.

Exterior work area: For lead hazard control work, the exterior work area includes any exterior building components, such as a porch or stairway; the safety perimeter; and access barriers.

Facility (pertaining to hazardous waste): All buildings, contiguous land, structures, and other appurtenances, as well as any improvements, where lead-based paint or hazardous waste is treated, stored, or disposed. A facility may consist of several different treatment, storage, or disposal units, such as landfills and surface impoundments.

Federal Register (FR): A daily Federal publication that contains proposed and final regulations, rules, and notices.

Fibermat: A semirigid woven material attached with a liquid adhesive to a surface or substrate.

Field blank: A clean sample of the matrix (e.g., filter, or wipe) that has been exposed to the sampling conditions; returned to the laboratory; and analyzed as an environmental sample. Clean quartz sand, air sampling filters and cassettes, and clean wipes can be used as field blanks. The field blank, which should be treated just like the sample, indicates possible sources of contamination.

FR: See Federal Register (FR).

Friction surface: Any interior or exterior surface, such as a window or stair tread, subject to abrasion or friction.

Generator: Any person whose act or operation produces hazardous waste identified or listed in 40 CFR Part 261 or whose act causes a hazardous waste to come under regulation (40 CFR 260.10).

Generator identification number: The unique number assigned by EPA to each generator; transporter of hazardous waste; and treatment, storage, or disposal facility.

Hazardous waste: As defined in EPA regulations (40 CFR 261.3), hazardous waste is solid waste or a combination of solid wastes that because of its quantity; concentration; or physical, chemical, or infectious characteristics may cause or significantly contribute to increases in mortality, serious and irreversible or incapacitating but reversible illnesses, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed. As defined in the regulations, solid waste is hazardous if it meets one of four conditions: (1) exhibits a characteristic of hazardous waste (40 CFR Sections 261.20 through 262.24); (2) has been listed as hazardous (40 CFR Section 261.31 through 261.33); (3) is a mixture containing a listed hazardous waste combined with a nonhazardous solid waste, unless the mixture is specifically excluded or no longer exhibits any of the characteristics of hazardous waste; and (4) is not excluded from regulation as hazardous waste. For lead-based paint abatement





waste, hazardous waste is waste that contains more than 5 ppm of leachable lead as determined by the TCLP test, or is waste that is corrosive, ignitable, or reactive and not otherwise excluded.

Hazardous Waste Manifest: See Manifest.

Heat gun: A device capable of heating leadbased paint causing it to separate from the substrate. For lead hazard control work, the heat stream leaving the gun should not exceed 1,100 °F (some authorities may use a different temperature).

HEPA filter: See High-Efficiency Particulate Air (HEPA) filter.

HEPA/wet wash/HEPA cycle: The cleaning cycle that begins with HEPA vacuuming, followed by a wet wash with a lead-specific cleaning agent, such as trisodium phosphate detergent or another liquid cleaning agent, followed by a final pass with a HEPA vacuum over the surface.

High-Efficiency Particulate Air (HEPA) filter: A filter capable of removing particles of 0.3 microns or larger from air at 99.97 percent or greater efficiency.

High phosphate detergent: See Trisodium phosphate (TSP) detergent.

Impact surface: An interior or exterior surface (such as surfaces on doors) subject to damage by repeated impact or contact.

Incinerator: An enclosed device using controlled flame combustion that neither meets the criteria for classification as a boiler nor is listed as an industrial furnace.

Industrial hygienist: A person having a college or university degree in engineering, chemistry, physics, medicine, or a related physical or biological science who, by virtue of special training, is qualified to anticipate, recognize, evaluate, and control environmental and occupational health hazards and the impact of those hazards on the community and workers.

In-place management: See Interim controls.

Inspection (of paint): A surface-by-surface investigation to determine the presence of lead-based paint (in some cases including dust and soil sampling) and a report of the results.

Inspector: An individual who has completed training from an accredited program and been licensed or certified by the appropriate State or local agency to (1) perform inspections to determine and report the presence of lead-based paint on a surface-by-surface basis through onsite testing, (2) report the findings of such an inspection, (3) collect environmental samples for laboratory analysis, (4) perform clearance testing, and (5) document successful compliance with lead-based paint hazard control requirements or standards.

Interim controls: A set of measures designed to temporarily reduce human exposure or possible exposure to lead-based paint hazards. Such measures include specialized cleaning, repairs, maintenance, painting, temporary containment, and management and resident education programs. Monitoring, conducted by owners, and reevaluations, conducted by professionals, are integral elements of interim control. Interim controls include dust removal; paint film stabilization; treatment of friction and impact surfaces; installation of soil coverings, such as grass or sod; and land-use controls. See also Monitoring, Reevaluation, and Abatement.

Interior window sill: The portion of the horizontal window ledge that protrudes into the interior of the room, adjacent to the window sash when the window is closed; often called the window stool.

Investigation (pertaining to EBL case): The process of determining the source of lead exposure for a child or other resident with an elevated blood lead level. Investigation consists of administration of a questionnaire, comprehensive environmental sampling, case management, and other measures.





Investigator: A person who conducts an investigation of a dwelling where a resident has an elevated blood lead level. The investigator must be proficient in interviewing techniques, environmental sampling, and the interpretation of risk assessment and environmental sampling data.

Laboratory analysis: A determination of the lead content by atomic absorption spectroscopy, inductively coupled plasma emission spectroscopy, or laboratory-based K or L x-ray fluorescence, or an equivalent method.

Landfill: A State-licensed or State-permitted disposal facility that meets municipal solid waste standards (see Federal regulations at 40 CFR 258).

Landfill liner: A continuous layer of natural or synthetic materials placed beneath and sometimes around a surface impoundment, landfill, or landfill cell. The layer restricts the downward or lateral escape of hazardous waste, hazardous waste constituents, or leachate (40 CFR Part 258).

Latex: A waterborne emulsion paint made with synthetic binders, such as 100-percent acrylic, vinyl acrylic, terpolymer, or styrene acrylic; a stable emulsion of polymers and pigment in water.

Lead: Lead includes metallic lead and inorganic and organic compounds of lead.

Lead-based paint: Any paint, varnish, shellac, or other coating that contains lead equal to or greater than 1.0 mg/cm² as measured by XRF or laboratory analysis, or 0.5 percent by weight $(5,000~\mu\text{g/g},\,5,000~\text{ppm},\,\text{or}\,5,000~\text{mg/kg})$ as measured by laboratory analysis. (Local definitions may vary.)

Lead-based paint hazard: A condition in which exposure to lead from lead-contaminated dust, lead-contaminated soil, or deteriorated lead-based paint would have an adverse effect on human health (as established by the EPA Administrator under Title IV of the Toxic Substances Control Act). Lead-based paint hazards

include for example, deteriorated lead-based paint, leaded dust levels above applicable standards, and bare leaded soil above applicable standards.

Lead-based paint hazard control: Activities to control and eliminate lead-based paint hazards, including interim controls, abatement, and complete abatement.

Lead-based paint abatement planner/designer: An individual who has completed an accredited training program on planning and designing lead-based paint abatement projects.

Lead-based paint abatement worker: See Worker.

Lead carbonate: A pigment used in some leadbased paints as a hiding agent; also known as white lead.

Lead-contaminated dust: Surface dust in residences that contains an area or mass concentration of lead in excess of the standard established by the EPA Administrator, pursuant to Title IV of the Toxic Substances Control Act. Until the EPA standards are set, the HUD-recommended clearance and risk assessment standards for leaded dust are 100 $\mu g/ft^2$ on floors, 500 $\mu g/ft^2$ on interior window sills, and 800 $\mu g/ft^2$ on window troughs. The recommended standard for lead hazard screens for floors is 50 $\mu g/ft^2$ and for window troughs is 400 $\mu g/ft^2$.

Lead-contaminated soil: Bare soil on residential property that contains lead in excess of the standard established by the EPA Administrator, pursuant to Title IV of the Toxic Substances Control Act. The HUD-recommended standard and interim EPA guidance is 400 $\mu g/g$ for high-contact play areas and 2,000 $\mu g/g$ in other bare areas of the yard. Soil contaminated with lead at levels greater than or equal to 5,000 $\mu g/g$ should be abated by removal or paving.

Lead-free dwelling: A lead-free dwelling contains no lead-based paint and has interior dust and exterior soil lead levels below the applicable HUD and EPA standards.





Lead hazard screen: A means of determining whether residences in good condition should have a full risk assessment. Also called a risk assessment screen.

Lead-poisoned child: A child with a single blood lead level that is greater than or equal to 20 μ g/dL or consecutive blood lead levels greater than or equal to 15 μ g/dL. Local definitions may vary.

Lead-specific detergent: A cleaning agent manufactured specifically for cleaning and removing leaded dust or other lead contamination.

Leaded dust: See Lead-contaminated dust.

Leaded zinc: A paint primer made from zinc oxide and lead sulfates.

Licensed: Holding a valid license or certification issued by EPA or by an EPA-approved State program pursuant to Title IV of the Toxic Substances Control Act. The license is based on certification for lead-based paint hazard control work. See also Certified.

Listed waste: A hazardous waste that has been placed on one of three lists developed by EPA: nonspecific source wastes, specific source wastes, and commercial chemical products. The lists were developed by examining different types of waste and chemical products to determine if they exhibited one of the four characteristics of hazardous waste (toxicity, corrosivity, ignitability, or reactivity), met the statutory definition of hazardous waste, were acutely toxic or acutely hazardous, or were otherwise toxic.

Maintenance: Work intended to maintain adequate living conditions in a dwelling, which has the potential to disturb lead-based paint or paint that is suspected of being lead-based.

Manifest: The shipping document (EPA Form 8700–22 or a comparable form required by the State or locality) used for identifying the quantity, composition, origin, routing, and destination of hazardous waste during its transport

from the point of generation to the point of treatment, storage, or disposal. Also, a shipping document used to keep track of items being transported. All hazardous waste must be accompanied by a manifest. See Hazardous waste.

Mat: See Walk-off mat.

Matrix blank: A sample of the matrix (paint chips, soil, or dust) that does not contain the analyte lead. This sample goes through the complete analysis, including digestion.

MDL: See Method detection limit (MDL).

Mean: The arithmetic average of a series of numerical data values; for example, the algebraic sum of the data values divided by the number of data values.

Medical removal: The temporary removal of workers from the job because of the occurrence of elevated blood lead levels as defined in the OSHA Lead Exposure in Construction standard (29 CFR 1926.62).

Method blank: See Digestion blank.

Method detection limit (MDL): The minimum concentration of an analyte that, for a given matrix and method, has a 99-percent probability of being identified, qualitatively or quantitatively measured, and reported to be greater than zero.

mg: Milligram; 1/1,000 of a gram.

Microgram: See µg.

Mil: 1/1,000 of an inch; used to measure thickness.

Milligram: See mg.

Monitoring: Surveillance to determine (1) that known or suspected lead-based paint is not deteriorating, (2) that lead-based paint hazard controls, such as paint stabilization, enclosure, or encapsulation have not failed, (3) that structural problems do not threaten the integrity of hazard controls or of known or suspected





lead-based paint, and (4) that dust lead levels have not risen above applicable standards. There are two types of monitoring activities; visual surveys by property owners and reevaluations by certified risk assessors. Visual surveys are generally conducted annually for the purpose of making the first three determinations listed above. Reevaluations are conducted in accordance with the Standard Reevaluation Schedule (or more frequently, if needed) for the purpose of making all four determinations. Monitoring is not required in properties known to be free of lead-based paint. See also Reevaluation and Standard reevaluation schedule.

Monofil: A State-approved landfill that accepts only construction debris.

Mouthable surface: See Chewed surface.

Multifamily housing: Housing that contains more than one dwelling unit per location.

NLLAP requirements: Requirements, specified by the EPA National Lead Laboratory Accreditation Program (NLLAP), for accreditation for the lead analysis of paint, soil, and dust matrixes by an EPA-recognized laboratory accreditation organization.

Offsite paint removal: The process of removing a component from a building and stripping the paint from the component at an offsite paint-stripping facility.

Ongoing monitoring: See Monitoring.

Owner: A person, firm, corporation, guardian, conservator, receiver, trustee, executor, government agency or entity, or other judicial officer who, alone or with others, owns, holds, or controls the freehold or leasehold title or part of the title to property, with or without actually possessing it. This definition includes a vendee who possesses the title, but does not include a mortgagee or an owner of a reversionary interest under a ground rent lease.

Oxidation: A chemical reaction that occurs upon exposure to oxygen. Some coatings cure by oxidation; oxygen enters the liquid coating and crosslinks (attaches) the resin molecules. This film-forming method is also called "air cure" or "air dry." Oxidation also causes rust to form on metals and paint to chalk.

Paint film stabilization: The process of wet scraping, priming, and repainting surfaces coated with deteriorated lead-based paint; paint film stabilization includes cleanup and clearance.

Paint removal: An abatement strategy that entails the removal of lead-based paint from surfaces. For lead hazard control work, this can mean using chemicals, heat guns below 1,100 °F, and certain *contained* abrasive methods. Open flame burning, open abrasive blasting, sandblasting, water blasting, and extensive dry scraping are prohibited paint removal methods. (Methylene chloride paint removers and dry scraping are also not recommended.)

Patch test: A test method or procedure to assess the adhesion of an encapsulant coating to a substrate covered with a layer or layers of lead-based paint.

Personal breathing zone samples: Air samples collected from the breathing zone of a worker (within a 1-foot radius of the worker's mouth) but outside the respirator. The samples are collected with a personal sampling pump operating at 2 liters per minute, drawing air through a 37 mm mixed cellulose ester filter housed in a closed-face cassette with a pore size of 0.8 microns. See Exposure monitoring.

Personal Protective Equipment (PPE): Equipment for protecting the eyes, face, head, and/or extremities; includes protective clothing, respiratory devices, and protective shields; used when hazards capable of causing bodily injury or impairment are encountered.





PHA: See Public Housing Agency (PHA).

Pigment: Insoluble, finely ground materials that give paint its properties of color and hide.

Pigment Volume Concentration (PVC): Pigment volume as a percentage of the total non-volatile ingredients.

Pilot project: In multifamily housing, the testing of a lead-based paint hazard control strategy on a limited number of dwellings, usually those that are vacant, to determine the feasibility of carrying out such a strategy in the entire multifamily housing development; usually involves paint testing, air sampling, wipe sampling, worksite preparation, and a variety of lead-based paint hazard control treatments.

Plastic: See Polyethylene plastic.

Polyethylene plastic: All references to polyethylene plastic refer to 6-mil plastic sheeting or polyethylene bags (or doubled bags if using 4-mil polyethylene bags), or any other thick plastic material shown to demonstrate at least equivalent performance. Plastic used to contain waste should be capable of completely containing the waste and, after being properly sealed, should remain leak-tight with no visible signs of discharge during movement or relocation.

Polyurethane: An exceptionally hard and wear-resistant coating created by the reaction of polyols with a multifunctional isocyanate; often used to seal wood floors following lead-based paint hazard control work and cleaning.

Precision: The degree to which a set of observations or measurements of the same property, usually obtained under similar conditions, conform to themselves; a data quality indicator. Precision is usually expressed in either absolute or relative terms as standard deviation, variance, or range. Often known as "reproducibility."

Primary prevention: The process of controlling lead hazards to prevent exposure *before* a child is poisoned. See Secondary prevention and Tertiary prevention.

Primary standard: A substance or device with a property or value that is unquestionably accepted, within specified limits, in establishing the value of the same or related property of another substance or device.

Public Housing Agency (PHA): Any State, county, municipality, or other government entity or public body, or agency or instrumentality thereof, authorized to engage or assist in the development or operation of housing for low-income families.

PVC: See Pigment Volume Concentration (PVC).

Quality Assurance (QA): An integrated system of activities involving planning, quality control, quality assessment, reporting, and quality improvement to ensure that a product or service meets defined standards of quality within a stated level of confidence.

Quality Control (QC): The overall system of technical activities whose purpose is to measure and control the quality of a product or service so that it meets the needs of users. The aim is to provide a level of quality that is satisfactory, adequate, dependable, and economical.

Random sample: A sample drawn from a population in a way that allows each member of the population to have an equal chance of being selected. Random sampling is a process used to identify locations for the lead-based paint inspections in multifamily dwellings. See also Targeted sample and Worst-case sample.

RCRA: See Resource Conservation and Recovery Act (RCRA).

Reevaluation: In lead hazard control work, the combination of a visual assessment and collection of environmental samples performed by a certified risk assessor to determine if a previously implemented lead-based paint hazard control measure is still effective and if the dwelling remains lead-safe.





Reference material: A material or substance that has at least one sufficiently well established property that can be used to calibrate an apparatus, assess a measurement method, or assign values to materials.

Reinspection: See Reevaluation.

Removal: See Paint removal.

Renovation: Work that involves construction and/or home or building improvement measures such as window replacement, weatherization, remodeling, and repainting.

Replacement: A strategy of abatement that entails the removal of building components coated with lead-based paint (such as windows, doors, and trim) and the installation of new components free of lead-based paint.

Representative sample: A sample of a universe or whole (e.g., waste sample pile, lagoon, groundwater, or waste stream) that can be expected to exhibit the average properties of the entire universe or whole.

Resident: A person who lives in a dwelling.

Resource Conservation and Recovery Act (RCRA): The primary Federal statute governing waste management from generation to disposal. RCRA defines the criteria for hazardous and nonhazardous waste.

Risk assessment: An onsite investigation of a residential dwelling to discover any lead-based paint hazards. Risk assessments include an investigation of the age, history, management, and maintenance of the dwelling, and the number of children under age 6 and women of childbearing age who are residents; a visual assessment; limited environmental sampling (i.e., collection of dust wipe samples, soil samples, and deteriorated paint samples); and preparation of a report identifying acceptable abatement and interim control strategies based on specific conditions.

Risk assessment screen: A type of risk assessment performed only in buildings in good condition using fewer samples but more stringent evaluation criteria (standards) to determine lead hazards.

Risk assessor: A certified individual who has completed training with an accredited training program and who has been certified to (1) perform risk assessments, (2) identify acceptable abatement and interim control strategies for reducing identified lead-based paint hazards, (3) perform clearance testing and reevaluations, and (4) document the successful completion of lead-based paint hazard control activities.

Sample site: A specific spot on a surface being tested for lead concentration.

Saponification: The chemical reaction between alkalies and oil that produces a type of soap. Because of saponification, oil and alkyd coatings will not adhere to masonry substrates, galvanized metals, or zinc-rich primers. Also a form of incompatibility between types of coatings.

Screen: See Risk assessment screen or Lead hazard screen.

Screening: The process of testing children to determine if they have elevated blood lead levels.

Secondary prevention: The process of identifying children who have elevated blood lead levels through screening and controlling or eliminating the sources of further exposure. See also Primary prevention and Tertiary prevention.

SEL: See Substrate Equivalent Lead (SEL).

Site: The land or body of water where a facility is located or an activity is conducted. The site includes adjacent land used in connection with the facility or activity.





Small-quantity generator: Owners, contractors (generators), or both who produce less than 100 kg of hazardous waste per month and accumulate less than 100 kg of hazardous waste at any one time, or who produce less than 1 kg of acutely hazardous waste per month and accumulate less than 1 kg of acutely hazardous waste at any one time.

Soil: See Bare soil.

Solid waste: As defined by RCRA, the term solid waste means garbage; refuse; sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility; or other discarded materials, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations or from community activities. The term does not include solid or dissolved material in domestic sewage or solid or dissolved material in irrigation return flows or industrial discharges (which are point sources subject to permits under the Clean Water Act), nor does the term include special nuclear or byproduct material as defined by the Atomic Energy Act of 1954.

Spectrum analyzer: A type of XRF analyzer that provides the operator with a plot of the energy and intensity, or counts of both K and L x-ray spectra, as well as a calculated lead concentration. See also XRF analyzer.

Spiked matrix: See Spiked sample.

Spiked sample: A sample prepared by adding a known mass of the target analyte (e.g., leaded dust) to a specific amount of matrix sample (e.g., one dust wipe) for which an independent estimate of the target analyte concentration is available. Spiked samples are used to determine, for example, the effect of the matrix on a method's recovery efficiency. See also Blind sample.

Spot-prime: To apply a paint primer to localized areas of exposed substrate.

Standard deviation: A measure of the precision of a reading; the spread of the deviation from the mean. The smaller the standard deviation, the more precise the analysis. The standard deviation is calculated by first obtaining the mean, or the arithmetic average, of all of the readings. A formula is then used to calculate how much the individual values vary from the mean—the standard deviation is the square root of the arithmetic average of the squares of the deviation from the mean. Many hand calculators have an automatic standard deviation function. See also Mean.

Standard reevaluation schedule (SRS): A schedule that determines the frequency that reevaluations should be performed on a property.

Standard reference material (SRM): A certified reference material produced by the National Institute of Standards and Technology (U.S. Department of Commerce) and characterized for absolute content independent of analytical method. See also Certified reference material.

Subsample: A representative portion of a sample. A subsample may be either a field sample or a laboratory sample. A subsample is often combined with other subsamples to produce a composite sample. See also Composite sample.

Substrate: A surface on which paint, varnish, or other coating has been applied or may be applied. Examples of substrates include wood, plaster, metal, and drywall.

Substrate effect: The radiation returned to an XRF analyzer by the paint, substrate, or underlying material, in addition to the radiation returned by any lead present. This radiation, when counted as lead x-rays by an XRF analyzer contributes to substrate equivalent lead (bias). The inspector may have to compensate for this effect when using XRF analyzers. See also XRF analyzer.





Substrate Equivalent Lead (SEL): The XRF measurement taken on an unpainted surface; used to calculate the corrected lead concentration on a surface by using the following formula: Apparent Lead Concentration—Substrate Equivalent Lead = Corrected Lead Concentration. See also Apparent Lead Concentration (ALC), Corrected Lead Concentration (CLC), and XRF analyzer.

Target housing: Any residential unit constructed before 1978, except dwellings that do not contain bedrooms or dwellings that were developed specifically for the elderly or persons with disabilities—unless a child younger than 6 resides or is expected to reside in the dwelling. In the case of jurisdictions that banned the sale or use of lead-based paint before 1978, the Secretary of HUD may designate an earlier date for defining target housing.

Targeted sample: A sample of dwelling units selected from an apartment building or housing development using information supplied by the owner. The units selected are likely to have the greatest probability of containing lead-based paint hazards. A targeted sample is usually selected for performing risk assessments in multifamily housing when it is not possible to select a worst-case sample. See also Worst-case sample and Random sample.

TCLP: See Toxicity Characteristic Leaching Procedure (TCLP).

Tertiary prevention: Providing medical treatment to children with elevated blood lead levels to prevent more serious injury or death.

Testing combination: A unique surface to be tested that is characterized by the room equivalent, component, substrate, and visible color.

Test location: A specific area on a testing combination where XRF instruments will test for lead-based paint.

Toxicity Characteristic Leaching Procedure (TCLP): A laboratory test to determine if excessive levels of lead or other hazardous materials could leach from a sample into groundwater; usually used to determine if waste is hazardous based on its toxicity characteristics.

Trained: Successful completion of a training course in a particular discipline. For lead hazard control work, the training course must be accredited by EPA or by an EPA-approved State program, pursuant to Title IV of the Toxic Substances Control Act.

Transporter: A person who transports hazardous waste, requiring a manifest under 40 CFR Part 260.10, within the United States by air, rail, highway, or water.

Treatment: In residential lead-based paint hazard control work, any method designed to control lead-based paint hazards. Treatment includes interim controls, abatement, and removal. Hazardous waste "treatment" is a method, technique, or process (such as neutralization) that is designed to change the physical, chemical, or biological character or composition of hazardous waste to neutralize it; render it nonhazardous or less hazardous; recover it; make it safer to transport, store, or dispose; or allow for easier recovery, storage, or volume reduction.

Treatment, Storage, and Disposal (TSD) facility: A facility licensed to handle hazardous waste.

Trisodium phosphate (TSP) detergent: A detergent that contains trisodium phosphate.

Trough: See Window trough.

Truck-mounted vacuum unit: A vacuum system whose components, except for hoses and attachments, are located outside the building undergoing dust removal. The exhaust is vented outside so that the interior dust is not disturbed.

TSD: See Treatment, Storage, and Disposal (TSD) facility.

TSP: See Trisodium phosphate (TSP) detergent.

 μ g (or ug): Micrograms. The prefix micromeans 1/1,000,000 (or one-millionth); a microgram is 1/1,000,000 of a gram and 1/1,000 of a milligram; equal to about 35/1,000,000,000 (35 billionths) of an ounce (an ounce is equal to 28,400,000 μ g).





Urethane-modified alkyd: An alkyd molecule that has been chemically modified by the incorporation of a urethane; a coating, often a varnish, that uses a urethane-modified alkyd resin in the binder.

Useful life: The life expectancy of a coating before it requires refinishing or some other form of maintenance.

VOC: See Volatile Organic Compound (VOC).

Volatile Organic Compound (VOC): Substances that vaporize or evaporate from a coating during the coating or curing process.

Walk-off mat: A washable, fibrous material (preferably with a rubber or vinyl backing) positioned at main entryways to reduce transport of lead dust and lead soil into a building or residence.

White lead: A white pigment, usually lead carbonate. See also Lead carbonate.

Window sill: See Interior window sill.

Window stool: See Interior window sill.

Window trough: For a typical double-hung window, the portion of the exterior window sill between the interior window sill (or stool) and the frame of the storm window. If there is no storm window, the window trough is the area that receives both the upper and lower window sashes when they are both lowered. Sometimes inaccurately called the window "well." See also Window well.

Window well: The space that provides exterior access and/or light to a window that is below grade, i.e., below the level of the surrounding earth or pavement. See also Window trough.

Worker: An individual who has completed training in an accredited program to perform lead-based paint hazard control in housing.

Worksite: Any interior or exterior area where lead-based paint hazard control work takes place.

Worksite preparation level: A set of measures designed to protect residents and the environment from leaded dust, paint chips, or other forms of lead contamination through the erection of barriers and the establishment of access control, resident relocation or movement restrictions, warning signs, ventilation, and other measures.

Worst-case sample: A sample of dwelling units having the greatest probability of containing lead-based paint hazards selected by a risk assessor on the basis of a visual examination of all dwelling units in a housing development or apartment building. See also Targeted sample and Random sample.

XRF analyzer: An instrument that determines lead concentration in milligrams per square centimeter (mg/cm²) using the principle of x-ray fluorescence (XRF). Two types of XRF analyzers are used—direct readers and spectrum analyzers. In these *Guidelines*, the term XRF analyzer only refers to portable instruments manufactured to analyze paint, and does not refer to laboratory-grade units or portable instruments designed to analyze soil.

Appendix 6

Renovate Right



AUTION CAUTION

CAUTION

CAUTION

CAUTION







1-800-424-LEAD (5323) www.epa.gov/getleadsafe EPA-740-K-10-001 April 2010



Important lead hazard information for families, child care providers and schools.





IT'S THE LAW!

Federal law requires contractors that disturb painted surfaces in homes, child care facilities and schools, built before 1978 to be certified and follow specific work practices to prevent lead contamination. Always ask to see your contractor's certification.

Federal law requires that individuals receive certain information before renovating more than six square feet of painted surfaces in a room for interior projects or more than twenty square feet of painted surfaces for exterior projects or window replacement or demolition in housing, child care facilities and schools built before 1978.

- Homeowners and tenants: renovators must give you this pamphlet before starting work.
- Child care facilities, including preschools and kindergarten classrooms, and the families of children under six years of age that attend those facilities: renovators must provide a copy of this pamphlet to child care facilities and general renovation information to families whose children attend those facilities.



WHO SHOULD READ THIS PAMPHLET?

This pamphlet is for you if you:

- Reside in a home built before 1978.
- Own or operate a child care facility, including preschools and kindergarten classrooms, built before 1978, or
- Have a child under six years of age who attends a child care facility built before 1978.

You will learn:

- Basic facts about lead and your health.
- How to choose a contractor, if you are a property owner.
- What tenants, and parents/guardians of a child in a child care facility or school should consider.
- How to prepare for the renovation or repair job.
- What to look for during the job and after the job is done.
- Where to get more information about lead.

This pamphlet is not for:

- Abatement projects. Abatement is a set of activities aimed specifically at
 eliminating lead or lead hazards. EPA has regulations for certification and training of
 abatement professionals. If your goal is to eliminate lead or lead hazards, contact the
 National Lead Information Center at 1-800-424-LEAD (5323) for more information.
- "Do-it-yourself" projects. If you plan to do renovation work yourself, this document is a good start, but you will need more information to complete the work safely. Call the National Lead Information Center at 1-800-424-LEAD (5323) and ask for more information on how to work safely

in a home with lead-based paint.

Contractor education. Contractors
 who want information about working
 safely with lead should contact
 the National Lead Information
 Center at 1-800-424-LEAD (5323)
 for information about courses and
 resources on lead-safe work practices.



RENOVATING, REPAIRING, OR PAINTING?



- Is your home, your building, or the child care facility or school your children attend being renovated, repaired, or painted?
- Was your home, your building, or the child care facility or school where your children under six years of age attend built before 1978?

If the answer to these questions is YES, there are a few important things you need to know about lead-based paint.

This pamphlet provides basic facts about lead and information about lead safety when work is being done in your home, your building or the child care facility or school your children attend.

The Facts About Lead

- Lead can affect children's brains and developing nervous systems, causing reduced IQ, learning disabilities, and behavioral problems. Lead is also harmful to adults.
- Lead in dust is the most common way people are exposed to lead. People can also get lead in their bodies from lead in soil or paint chips. Lead dust is often invisible.
- Lead-based paint was used in more than 38 million homes until it was banned for residential use in 1978.
- Projects that disturb painted surfaces can create dust and endanger you and your family. Don't let this happen to you. Follow the practices described in this pamphlet to protect you and your family.

LEAD AND YOUR HEALTH

Lead is especially dangerous to children under six years of age.

Lead can affect children's brains and developing nervous systems, causing:

- Reduced IQ and learning disabilities.
- · Behavior problems.

Even children who appear healthy can have dangerous levels of lead in their bodies.

Lead is also harmful to adults. In adults, low levels of lead can pose many dangers, including:

- High blood pressure and hypertension.
- Pregnant women exposed to lead can transfer lead to their fetuses. Lead gets into the body when it is swallowed or inhaled.
- People, especially children, can swallow lead dust as they eat, play, and do other normal hand-to-mouth activities.
- People may also breathe in lead dust or fumes if they disturb lead-based paint.
 People who sand, scrape, burn, brush or blast or otherwise disturb lead-based paint risk unsafe exposure to lead.

What should I do if I am concerned about my family's exposure to lead?

- Call your local health department for advice on reducing and eliminating exposures to lead inside and outside your home, child care facility or school.
- Always use lead-safe work practices when renovation or repair will disturb painted surfaces.
- A blood test is the only way to find out if you or a family member already has lead poisoning. Call your doctor or local health department to arrange for a blood test.

For more information about the health effects of exposure to lead, visit the EPA lead website at www.epa.gov/lead/pubs/leadinfo.htm or call 1-800-424-LEAD (5323).

There are other things you can do to protect your family every day.

- Regularly clean floors, window sills, and other surfaces.
- Wash children's hands, bottles, pacifiers, and toys often.
- Make sure children eat a healthy, nutritious diet consistent with the USDA's dietary guidelines, that helps protect children from the effects of lead.
- Wipe off shoes before entering house.



WHERE DOES THE LEAD COME FROM?

Dust is the main problem.

The most common way to get lead in the body is from dust. Lead dust comes from deteriorating lead-based paint and lead-contaminated soil that gets tracked into your home. This dust may accumulate to unsafe levels. Then, normal hand to-mouth activities, like playing and eating (especially in young children), move that dust from surfaces like floors and window sills into the body.

Home renovation creates dust.

Common renovation activities like sanding, cutting, and demolition can create hazardous lead dust and chips.

Proper work practices protect you from the dust.

The key to protecting yourself and your family during a renovation, repair or painting job is to use lead-safe work practices such as containing dust inside the work area, using dust-minimizing work methods, and conducting a careful cleanup, as described in this pamphlet.

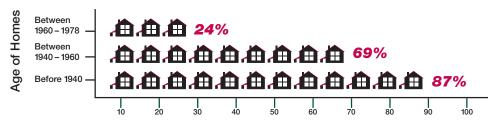
Other sources of lead.

Remember, lead can also come from outside soil, your water, or household items (such as lead-glazed pottery and lead crystal). Contact the National Lead Information Center at 1-800-424-LEAD (5323) for more information on these sources.



CHECKING YOUR HOME FOR LEAD-BASED PAINT

Percentage of Homes Likely to Contain Lead



Older homes, child care facilities, and schools are more likely to contain lead-based paint.

Homes may be single-family homes or apartments. They may be private, government-assisted, or public housing. Schools are preschools and kindergarten classrooms. They may be urban, suburban, or rural.

You have the following options:

You may decide to assume your home, child care facility, or school contains lead. Especially in older homes and buildings, you may simply want to assume lead-based paint is present and follow the lead-safe work practices described in this brochure during the renovation, repair, or painting job.

You can hire a certified professional to check for lead-based paint.

These professionals are certified risk assessors or inspectors, and can determine if your home has lead or lead hazards.

- A certified inspector or risk assessor can conduct an inspection telling you whether your home, or a portion of your home, has lead-based paint and where it is located. This will tell you the areas in your home where lead-safe work practices are needed.
- A certified risk assessor can conduct a risk assessment telling you if your home currently has any lead hazards from lead in paint, dust, or soil. The risk assessor can also tell you what actions to take to address any hazards.
- For help finding a certified risk assessor or inspector, call the National Lead Information Center at 1-800-424-LEAD (5323).

You may also have a certified renovator test the surfaces or components being disturbed for lead using a lead test kit. Test kits must be EPA-recognized and are available at hardware stores. They include detailed instructions for their use.

FOR PROPERTY OWNERS

You have the ultimate responsibility for the safety of your family, tenants, or children in your care.

This means properly preparing for the renovation and keeping persons out of the work area (see p. 8). It also means ensuring the contractor uses lead-safe work practices.

Federal law requires that contractors performing renovation, repair and painting projects that disturb painted surfaces in homes, child care facilities, and schools built before 1978 be certified and follow specific work practices to prevent lead contamination.

Make sure your contractor is certified, and can explain clearly the details of the job and how the contractor will minimize lead hazards during the work.

- You can verify that a contractor is certified by checking EPA's website at epa.gov/getleadsafe or by calling the National Lead Information Center at 1-800-424-LEAD (5323). You can also ask to see a copy of the contractor's firm certification.
- Ask if the contractor is trained to perform lead-safe work practices and to see a copy of their training certificate.
- Ask them what lead-safe methods they will use to set up and perform the job in your home, child care facility or school.
- Ask for references from at least three recent jobs involving homes built before 1978, and speak to each personally.

Always make sure the contract is clear about how the work will be set up, performed, and cleaned.

- Share the results of any previous lead tests with the contractor.
- You should specify in the contract that they follow the work practices described on pages 9 and 10 of this brochure.
- The contract should specify which parts of your home are part of the work area and specify which lead-safe work practices will be used in those areas. Remember, your contractor should confine dust and debris to the work area and should minimize spreading that dust to other areas of the home.
- The contract should also specify that the contractor will clean the work area, verify that it was cleaned adequately, and re-clean it if necessary.

If you think a worker is not doing what he is supposed to do or is doing something that is unsafe, you should:

- Direct the contractor to comply with regulatory and contract requirements.
- Call your local health or building department, or
- Call EPA's hotline 1-800-424-LEAD (5323).

If your property receives housing assistance from HUD (or a state or local agency that uses HUD funds), you must follow the requirements of HUD's Lead-Safe Housing Rule and the ones described in this pamphlet.

FOR TENANTS AND FAMILIES OF CHILDREN UNDER SIX YEARS OF AGE IN CHILD CARE FACILITIES AND SCHOOLS

You play an important role ensuring the ultimate safety of your family.

This means properly preparing for the renovation and staying out of the work area (see p. 8).

Federal law requires that contractors performing renovation, repair and painting projects that disturb painted surfaces in homes built before 1978 and in child care facilities and schools built before 1978, that a child under six years of age visits regularly, to be certified and follow specific work practices to prevent lead contamination.

The law requires anyone hired to renovate, repair, or do painting preparation work on a property built before

1978 to follow the steps described on pages 9 and 10 unless the area where the work will be done contains no lead-based paint.

If you think a worker is not doing what he is supposed to do or is doing something that is unsafe, you should:

- · Contact your landlord.
- · Call your local health or building department, or
- Call EPA's hotline 1-800-424-LEAD (5323).

If you are concerned about lead hazards left behind after the job is over, you can check the work yourself (see page 10).



7

PREPARING FOR A RENOVATION

The work areas should not be accessible to occupants while the work occurs.

The rooms or areas where work is being done may need to be blocked off or sealed with plastic sheeting to contain any dust that is generated. Therefore, the contained area may not be available to you until the work in that room or area is complete, cleaned thoroughly, and the containment has been removed. Because you may not have access to some areas during the renovation, you should plan accordingly.

You may need:

- Alternative bedroom, bathroom, and kitchen arrangements if work is occurring in those areas of your home.
- A safe place for pets because they too can be poisoned by lead and can track lead dust into other areas of the home.
- A separate pathway for the contractor from the work area to the outside in order to bring materials in and out of the home. Ideally, it should not be through the same entrance that your family uses.
- A place to store your furniture. All furniture and belongings may have to be moved from the work area while the work is being done. Items that can't be moved, such as cabinets, should be wrapped in plastic.
- To turn off forced-air heating and air conditioning systems while the work is being done. This prevents dust from spreading through vents from the work area to the rest of your home. Consider how this may affect your living arrangements.

You may even want to move out of your home temporarily while all or part of the work is being done.

Child care facilities and schools may want to consider alternative accommodations for children and access to necessary facilities.



DURING THE WORK

Federal law requires contractors that are hired to perform renovation, repair and painting projects in homes, child care facilities, and schools built before 1978 that disturb painted surfaces to be certified and follow specific work practices to prevent lead contamination.

The work practices the contractor must follow include these three simple procedures, described below:

- 1. Contain the work area. The area must be contained so that dust and debris do not escape from that area. Warning signs must be put up and plastic or other impermeable material and tape must be used as appropriate to:
 - Cover the floors and any furniture that cannot be moved.
 - Seal off doors and heating and cooling system vents.

These will help prevent dust or debris from getting outside the work area.

2. Avoid renovation methods that generate large amounts of lead-contaminated dust.

Some methods generate so much lead-contaminated dust that their use is prohibited.

They are:

- · Open flame burning or torching.
- Sanding, grinding, planing, needle gunning, or blasting with power tools and equipment not equipped with a shroud and HEPA vacuum attachment.
- Using a heat gun at temperatures greater than 1100°F.

There is no way to eliminate dust, but some renovation methods make less dust than others. Contractors may choose to use various methods to minimize dust generation, including using water to mist areas before sanding or scraping; scoring paint before separating components; and prying and pulling apart components instead of breaking them.

- **3. Clean up thoroughly.** The work area should be cleaned up daily to keep it as clean as possible. When all the work is done, the area must be cleaned up using special cleaning methods before taking down any plastic that isolates the work area from the rest of the home. The special cleaning methods should include:
 - Using a HEPA vacuum to clean up dust and debris on all surfaces, followed by
 - Wet wiping and wet mopping with plenty of rinse water.

When the final cleaning is done, look around. There should be no dust, paint chips, or debris in the work area. If you see any dust, paint chips, or debris, the area must be re-cleaned.

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FOR PROPERTY OWNERS: AFTER THE WORK IS DONE

When all the work is finished, you will want to know if your home, child care facility, or school has been cleaned up properly. Here are some ways to check.

Ask about your contractor's final cleanup check. Remember, lead dust is often invisible to the naked eye. It may still be present even if you cannot see it. The contractor must use disposable cleaning cloths to wipe the floor of the work area and compare them to a cleaning verification card to determine if the work area was adequately cleaned.

To order a cleaning verification card and detailed instructions visit the EPA lead website at www.epa.gov/lead or contact the National Lead Information Center at 1-800-424-LEAD (5323) or visit their website at www.epa.gov/lead/nlic.htm.

You also may choose to have a lead-dust test. Lead-dust tests are wipe samples sent to a laboratory for analysis.

- You should specify in your contract that a lead-dust test will be done. In this case, make it clear who will do the testing.
- Testing should be done by a lead professional.

If you choose to do the testing, some EPA-recognized lead laboratories will send you a kit that allows you to collect samples and send them back to the lab for analysis.

Contact the National Lead Information Center at 1-800-424-LEAD (5323) for lists of qualified professionals and EPA-recognized lead labs.

If your home, child care facility, or school fails the dust test, the area should be re-cleaned and tested again.

Where the project is done by contract, it is a good idea to specify in the contract that the contractor is responsible for re-cleaning if the home, child care facility, or school fails the test.



FOR ADDITIONAL INFORMATION

You may need additional information on how to protect yourself and your children while a job is going on in your home, your building, or child care facility.

The National Lead Information Center at 1-800-424-LEAD (5323) or www.epa.gov/lead/nlic.htm can tell you how to contact your state, local, and/or tribal programs or get general information about lead poisoning prevention.

- State and tribal lead poisoning prevention or environmental protection programs can provide information about lead regulations
- and potential sources of financial aid for reducing lead hazards. If your state or local government has requirements more stringent than those described in this pamphlet, you must follow those requirements.
- Local building code officials can tell you the regulations that apply to the renovation work that you are planning.
- State, county, and local health departments can provide information about local programs, including assistance for lead-poisoned children and advice on ways to get your home checked for lead.

The National Lead Information Center can also provide a variety of resource materials, including the following guides to lead-safe work practices. Many of these materials are also available at www.epa.gov/lead/pubs/brochure.htm.

- Steps to Lead Safe Renovation, Repair and Painting.
- Protect Your Family from Lead in Your Home
- Lead in Your Home: A Parent's Reference Guide





For the hearing impaired, call the Federal Information Relay Service at 1-800-877-8339 to access any of the phone numbers in this brochure.

10 11

OTHER FEDERAL AGENCIES

EPA Regional Offices

EPA addresses residential lead hazards through several different regulations. EPA requires training and certification for conducting abatement and renovations, education about hazards associated with renovations, disclosure about known lead paint and lead hazards in housing, and sets lead-paint hazard standards.

Your Regional EPA Office can provide further information regarding lead safety and lead protection programs at **epa.gov/lead**.

Region 1

(Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island, Vermont) Regional Lead Contact U.S. EPA Region 1 Suite 1100 One Congress Street Boston, MA 02114-2023 (888) 372-7341

Region 2

(New Jersey, New York, Puerto Rico, Virgin Islands) Regional Lead Contact U.S. EPA Region 2 2890 Woodbridge Avenue Building 205, Mail Stop 225 Edison, NJ 08837-3679 (732) 321-6671

Region 3

(Delaware, Maryland, Pennsylvania, Virginia, Washington, DC, West Virginia) Regional Lead Contact U.S. EPA Region 3 1650 Arch Street Philadelphia, PA 19103-2029 (215) 814-5000

Region 4

(Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee) Regional Lead Contact U.S. EPA Region 4 61 Forsyth Street, SW Atlanta, GA 30303-8960 (404) 562-9900

Region 5

(Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin) Regional Lead Contact U.S. EPA Region 5 77 West Jackson Boulevard Chicago, IL 60604-3507 (312) 886-6003

Region 6

(Arkansas, Louisiana, New Mexico, Oklahoma, Texas) Regional Lead Contact U.S. EPA Region 6 1445 Ross Avenue, 12th Floor Dallas, TX 75202-2733 (214) 665-6444

Region 7

(Iowa, Kansas, Missouri, Nebraska) Regional Lead Contact U.S. EPA Region 7 901 N. 5th Street Kansas City, KS 66101 (913) 551-7003

Region 8

(Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming) Regional Lead Contact U.S. EPA Region 8 1595 Wynkoop Street Denver, CO 80202 (303) 312-6312

Region 9

(Arizona, California, Hawaii, Nevada) Regional Lead Contact U.S. Region 9 75 Hawthorne Street San Francisco, CA 94105 (415) 947-8021

Region 10

(Alaska, Idaho, Oregon, Washington) Regional Lead Contact U.S. EPA Region 10 1200 Sixth Avenue Seattle, WA 98101-1128 (206) 553-1200

CPSC

The Consumer Product Safety
Commission (CPSC) protects the public
from the unreasonable risk of injury or
death from 15,000 types of consumer
products under the agency's jurisdiction.
CPSC warns the public and private
sectors to reduce exposure to lead and
increase consumer awareness. Contact
CPSC for further information regarding
regulations and consumer product safety.

CPSC

4330 East West Highway Bethesda, MD 20814 Hotline 1-(800) 638-2772 www.cpsc.gov

CDC Childhood Lead Poisoning Prevention Branch

The Centers for Disease Control and Prevention (CDC) assists state and local childhood lead poisoning prevention programs to provide a scientific basis for policy decisions, and to ensure that health issues are addressed in decisions about housing and the environment. Contact CDC Childhood Lead Poisoning Prevention Program for additional materials and links on the topic of lead.

CDC Childhood Lead Poisoning Prevention Branch

4770 Buford Highway, MS F-40 Atlanta, GA 30341 (770) 488-3300 www.cdc.gov/nceh/lead

HUD Office of Healthy Homes and Lead Hazard Control

The Department of Housing and Urban Development (HUD) provides funds to state and local governments to develop cost-effective ways to reduce lead-based paint hazards in America's privately-owned low-income housing. In addition, the office enforces the rule on disclosure of known lead paint and lead hazards in housing, and HUD's lead safety regulations in HUD-assisted housing, provides public outreach and technical assistance, and conducts technical studies to help protect children and their families from health and safety hazards in the home. Contact the HUD Office of Healthy Homes and Lead Hazard Control for information on lead regulations, outreach efforts, and lead hazard control research and outreach grant programs.

U.S. Department of Housing and Urban Development

Office of Healthy Homes and Lead Hazard Control 451 Seventh Street, SW, Room 8236 Washington, DC 20410-3000 HUD's Lead Regulations Hotline (202) 402-7698 www.hud.gov/offices/lead/

12 13



SAMPLE PRE-RENOVATION FORM

This sample form may be used by renovation firms to document compliance with the Federal pre-renovation education and renovation, repair, and painting regulations.

Occupant Confirmation Pamphlet Receipt

□ I have received a copy of the lead hazard information pamphlet informing me of the potential risk of the lead hazard exposure from renovation activity to be performed in my dwelling unit. I received this pamphlet before the work began.					
Printed Name of Owner-occupant					
Signature of Owner-occupant	Signature Date				
Renovator's Self Certification Option (for tend Instructions to Renovator: If the lead hazard int signature was not obtainable, you may check t	formation pamphlet was delivered but a tenant				
pamphlet to the rental dwelling unit listed b	faith effort to deliver the lead hazard information elow at the date and time indicated and that the of receipt. I further certify that I have left a copy nt.				
was unavailable to sign the confirmation of r	ave made a good faith effort to deliver the lead lwelling unit listed below and that the occupant receipt. I further certify that I have left a copy of the door or by (fill in how pamphlet was left).				
Printed Name of Person Certifying Delivery	Attempted Delivery Date				
Signature of Person Certifying Lead Pamphlet	Delivery				
Unit Address					

Note Regarding Mailing Option — As an alternative to delivery in person, you may mail the lead hazard information pamphlet to the owner and/or tenant. Pamphlet must be mailed at least seven days before renovation. Mailing must be documented by a certificate of mailing from the post office.

COMPREHENSIVE ASBESTOS SURVEY REPORT FOR DEMOLITION

PROJECT NAME:

ORANGE COUNTY JUVENILE HALL-BUILDING 8 (ROOMS 10-14)



PROJECT ADDRESS:

331 The City Drive, S. Orange, California 92868

Prepared for:

Mr. Scott L. Battles Vanir Construction Management, Inc 4540 Duckhorn Drive, Suite 300 Sacramento, California 95834

Prepared by:

MTGL, Inc. 7742 Arjons Dr. San Diego, California 92126 858-537-3999

Project Number:

SDPE-24-061.1CT

Report By:

Michelle Ehresman, CAC

CAC Certification Number: 14-5323

CAC Expiration Date: November 19, 20204

Date of Report:

April 18, 2024

Version 1.0

TABLE OF CONTENTS

INTRODUCTIONSection 1
General Information
Project Information
Site/Building Description
Suspect Materials Observed
INVESTIGATION LIMITATIONS & WARRANTYSection 2
ASBESTOS SURVEY METHODOLOGYSection 3
General References
Visual Inspection
Homogeneous Material Classifications
Sampling Procedures
Laboratory Procedures
Method of Analysis
Laboratory Quality Control Program
ASBESTOS SURVEY OBSERVATIONS AND FINDINGS Section 4
Summary
Table 1: Positively Identified Materials that Contain Asbestos (ACM and ACCM) and
Assessment of Material Condition.
Table 2: Materials found to be Negative for Asbestos
General Information
Environmental Protection Agency (EPA)
California Occupational Safety & Health Agency (Cal/OSHA)
National Emission Standards for Hazardous Air Pollutants (NESHAP)
CONCLUSIONS & RECOMMENDATIONS Section 5
APPENDICES Section 6
Appendix 1 – Asbestos Laboratory Results & Chain of Custodies
Appendix 2 – Site Map with Sample Location
Appendix 3 – Photo Documentation
Appendix 4 – Inspector Certifications

SECTION 1 INTRODUCTION

GENERAL INFORMATION

MTGL, Inc. was retained to conduct a survey for suspect asbestos containing materials. The intent of this survey is to pre-determine the presence of EPA/OSHA regulated Asbestos Containing Materials and Asbestos Containing Construction Materials (ACCM) that may need to be addressed prior to scheduled demolition and/or renovation activities.

MTGL's scope of work was limited to the following:

- Review of project drawings.
- Conduct a pre-construction asbestos inspection limited to Client specified locations in accordance with NESHAP Regulations and the collection of bulk samples of suspect ACM.
- Submit samples to a NVLAP accredited laboratory for analysis of asbestos fiber content using polarized-light microscopy.
- Prepare report with material description, sampling locations, analytical results, and recommendations for proper handling/abatement prior to demolition and/or renovation activities.

PROJECT INFORMATION

Survey Requested/Authorized By: Mr. Scott L. Battles

Type of Survey Requested: Limited (Restricted to Client Specified Locations Only)

Destructive Sampling Allowed by Client: Yes

Project Name: ORANGE COUNTY JUVENILE HALL BUILDING 8 (ROOMS 10-14)

Project Address: 331 The City of Orange Dr. S in the city of Orange in the State of California.

Date of Inspection: April 1, 2024 to April 1, 2024

AHERA Certified Building Inspector Name: Darla Beery

AHERA Certified Building Inspector Number: 2023ABCA171101

Additional AHERA Certified Building Inspector Name: Michelle Ehresman

Additional AHERA Certified Building Inspector Number: ABIR0727230010N35227

Local Air District: South Coast Air Quality Management District (Sampling method, lab

qualifications, lab analytical procedures, and lab method of analysis were performed in compliance with Rule 1403 (d)(1)(A) and 40 CFR Part 763 -

Asbestos. requirments)

Laboratory: EMLab P&K, LLC – ID#: 3592262/3600734

9445 Farnham St, Suite 103, San Diego, CA 92123

(866) 888-6653 Fax (623) 780-7695 www.emlab.com

Laboratory Sample Analysis Method: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA

METHOD 600/R-93-116, SOP EM-AS-S-1267)

Sampling Protocols: EPA 40CFR 763.86 Methods

SITE/BUILDING DESCRIPTION

Structure Type: Commercial Facility

Year Built: Unknown

Date of known additions: Unknown

Building Structural Damage (If Any): None Observed

Approximate Square Feet of Surveyed Area: 2,800

Structure Frame: Wood

If other, describe: None

Structure Foundation: Concrete Slab On Grade

If other, describe: None

Number of Floors: 1

Building Occupied: Yes

SUSPECT MATERIALS OBSERVED

Suspect Materials Observed During the Asbestos Survey Conducted

- Drywall
- Sheet Vinyl over Carpet Glue
- Cove Base Glue
- Concrete Block Wall
- Structural Fireproofing
- 2'x2' Dotted Ceiling Tile
- Fiberglass Pipe Wrap
- HVAC Seam Caulk
- Exterior Stucco
- Concrete Slab
- Asphalt
- Ceramic Wall Tile/Ceramic Floor Tile
- Window Sealant
- Leveling Compound

Inaccessible Materials Presumed to be Asbestos Content:

• Roof (Refer to Table 1 Notes)

SECTION 2 INVESTIGATION LIMITATIONS & WARRANTY

Per the agreement between The Client and MTGL, Inc., the scope of services was performed as described in this report.

The intent of this survey is to pre-determine the presence of EPA/OSHA regulated asbestos containing building materials that may need to be addressed prior to scheduled demolition and/or renovation activities.

INVESTIGATION LIMITATIONS

MTGL, Inc. did not conduct testing within interstitial wall cavities, ceiling plenums, HVAC ventilation systems or crawlspaces or other locations of the facility, outside of the Client specified areas.

The findings of this report are valid as of the date of the survey and sample collection. Changes in the condition of the property can occur with passage of time, whether they are due to natural processes or the works of man on this or adjacent properties. In addition, changes in the state-of-art technology and/or government codes may occur. Due to such changes, the findings of this report may be invalidated wholly or in part by conditions beyond our control. Due to changes that can occur over time, submittals of this report to Regulatory Agencies may require additional site visits and assessment to document current conditions.

The final assessment of the potential for the existence of hazardous contaminants at the site should be considered a professional opinion based on the data obtained during the investigation and should not be considered a definitive statement that a hazardous contaminant or conditions are, or is not, present in the area of study. These opinions have been derived in accordance with current standards of practice.

This report is intended solely for use by the parties to whom it is addressed. This report is not intended for and may not contain sufficient information for purposes other than qualitative evaluation of asbestos or conditions at the time of our evaluation. Reliance on this report for other purposes or by other parties shall be at the user's sole risk.

WARRANTY

MTGL, Inc. warrants that the findings contained herein have been prepared with the level of care and skill exercised by experienced and knowledgeable environmental consultants who are appropriately licensed or otherwise trained to perform asbestos inspections and assessments pursuant to the scope of work required on this project. MTGL's Asbestos Survey Reports are prepared by trained certified professionals without a conflict of interest in the demolition(s) or renovation project(s) as per the Business and Professions Code 7180 (BP7180).

MTGL, Inc. warrants that the findings contained herein have been prepared in general accordance with accepted professional practices as applied by similar professionals in the community at the time of its preparation. Changes in the state of the art or in applicable regulations cannot be anticipated and have not been addressed in this report.

The survey included inspection of visible and accessible materials. MTGL did not inspect or sample inaccessible areas and did not dismantle any part of the structure to survey inaccessible areas. For the purpose of this warranty, inaccessible is defined as areas that could not be tested (sampled) without destruction of the structure or a portion of the structure. Inaccessible materials that are visible to MTGL's inspectors shall be assumed to be asbestos containing. No other warranty is expressed, or implied.

SECTION 3 ASBESTOS SURVEY METHODOLOGY

GENERAL REFERENCES

The asbestos survey consisted of two major activities: visual inspection and sampling. Although these activities are listed separately, they are integrated tasks.

VISUAL INSPECTION

The visual inspection was performed by an AHERA Certified Building Inspector under the direction of a California Certified Asbestos Consultant. An initial building walkthrough was conducted to determine the presence of suspect materials that were accessible or exposed. Materials that were similar in general appearance were grouped into homogeneous sampling areas.

HOMOGENEOUS MATERIAL CLASSIFICATIONS

A preliminary walkthrough of the building was conducted to determine areas of materials that were visually similar in color, texture, and general appearance and that appeared to have been installed at the same time. Such materials are termed "homogeneous materials" by the EPA. During this walkthrough, the approximate locations of these homogeneous materials were noted. Only materials that were accessible or exposed and suspected to contain asbestos were identified.

Following the EPA protocols, each identified suspect homogeneous material is placed in one of the following EPA classifications:

- Surfacing Materials (spray or trowel applied materials)
- Thermal System Insulation (materials applied to various mechanical systems)
- Miscellaneous Materials (any material which do not fit either of the above categories, such as floor tiles, etc.)

SAMPLING PROCEDURES

Following the walkthrough, the inspector collected selected samples of exposed or accessible materials identified as suspect material. Sampling was limited to accessible materials not involving destruction of walls, other building elements, physical barriers, or the structural integrity of the item being tested.

EPA guidelines were used to determine the sampling protocol. Sampling locations that were chosen to be representative of the homogeneous sampling area. While an effort was made to collect samples randomly, samples were taken preferentially from damaged areas or areas which were the least visible to minimize disturbance of the material.

Samples of surfacing material were collected in general accordance with the EPA random sampling protocol outlined in the EPA publication, "Asbestos in Buildings: Simplified Sampling Scheme for Friable Surfacing Materials" (EPA 560/5-85-030a, October 1985).

Samples of miscellaneous materials were also taken as randomly as possible, while attempting to sample already damaged areas so as to minimize disturbance of the material.

A minimum of three samples were collected of each homogeneous material. Depending on the quantity of homogeneous material, additional samples may be collected to avoid the possibility of false negative results.

LABORATORY PROCEDURES

Method of Analysis

Analysis was performed by visually observing the bulk sample and preparing slides for microscopic examination and identification. The samples were mounted on slides and then analyzed for asbestos (chrysotile, amosite, crocidolite, anthophyllite, and actinolite/tremolite), fibrous non-asbestos constituents (mineral wool, paper, etc.) and nonfibrous constituents. Asbestos was identified by refractive indices, morphology, color, pleochroism, birefringence, extinction characteristics, and signs of elongation. The same characteristics were used to identify the non-asbestos constituents.

The microscopist used a stereoscope to visually estimate relative amounts of each constituent using a stereoscope to determine the volume of each constituent in proportion to the total volume of the sample.

All bulk samples were analyzed by Polarized Light Microscopy (PLM) with dispersion staining as described by the Interim Method of the Determination of Asbestos in Bulk Insulation, Federal Register, 40 CFR Ch. 1 Pt. 763, App. A to Subpart. F, July 1, 1987. This is a standard method of analysis in optical mineralogy and the currently accepted method for the determination of asbestos in bulk samples. A suspect material is immersed in a solution of known refractive index and subjected to illumination by polarized light. The characteristic color displays that result enable mineral identification. It should be noted that some ACM may not be accurately identified or quantified by PLM. As an example, the original fabrication of vinyl floor tiles routinely involved milling of asbestos fibers to extremely small sizes. As a result, these fibers may go undetected under the standard polarized light microscopy method. Transmission Electron Microscopy (TEM) is recommended for a more definitive analysis of these materials. MTGL, Inc. has no control over how the laboratory describes materials or layers of materials being analyzed. Although a minimum of three samples are collected of suspect building materials, first positive stops may be requested of the laboratory and the results of the one positive sample will be reported. All other homogeneous materials will be assumed to be positive for asbestos content.

Laboratory Quality Control Program

MTGL, Inc. only uses laboratories that maintain an in-house quality control program. This program involves blind reanalysis of ten percent of all samples, precision and accuracy controls, and use of standard bulk reference materials.

SECTION 4 ASBESTOS OBSERVATIONS AND FINDINGS

SUMMARY

Table 1: Positively Identified Materials that Contain Asbestos (ACM and ACCM) and Assessment of Material Condition (as of the date the survey was conducted). Laboratory Results can be found in Appendix 1.

Material* Description	Location*	Sample #	Approximate Quantity**	AHERA Rank***	Friability/ Material Type	Damage Category	Quantity of Contamination (If any) **	Asbestos Content
Roofing Material	Roof		2,800	X	Non-Friable	1	None	Assumed

Note: All layers of the roof system were inaccessible at the time of the inspection. Roofing materials are assumed to contain asbestos until further testing can be determined otherwise.

*Positively identified ACM and ACCM that are similar in color and texture in other locations throughout the structure and facility shall be considered as asbestos containing until further sampling/analysis determines otherwise. In the event suspect asbestos containing materials are discovered during maintenance, renovation and/or demolition that are not identified in this report, disturbance of the materials should be stopped until further assessment of the material for asbestos content can be conducted.

**MTGL, Inc. is not responsible for actual quantity of the material(s). MTGL recommends bidding contractors measure and calculate quantities for estimated abatement costs and notifications. (sf= square foot; NA= not applicable))

***Each homogeneous area of friable and non-friable asbestos-containing material (ACM) was classified into one of the following seven categories, as specified in EPA's AHERA regulations (40 CFR 763.88):

- (1) Damaged or significantly damaged thermal system insulation ACM.
- (2) Damaged friable surfacing ACM.
- (3) Significantly damaged friable surfacing ACM.
- (4) Damaged or significantly damaged friable miscellaneous ACM.
- (5) ACBM with potential for damage.
- (6) ACBM with potential for significant damage.
- (7) Any remaining friable ACBM or friable suspected ACBM.
- (X) Not applicable (material is non-friable surfacing or miscellaneous material).

The damage categories are defined as follows:

Category 1 - "Undamaged" means the material had no visible damage, or extremely minor damage or surface marring (i.e., a room full of floor tile with only two or three small corners chipped off on the tile).

Category 2 - "Damaged" means the material had visible damage evenly distributed over less than 10% of its surface, or localized over less than 25% of its surface.

Category 3 -"Significantly Damaged" means the material had visible damage that is evenly distributed over 10% or more of its surface, or localized over 25% or more if its surface.

Table 2: Materials found to be Negative for Asbestos (as of the date the survey was conducted). Laboratory results can be found in Appendix 1.

Material* Description	Sample #		
Drywall	1, 2, 3		
Sheet Vinyl over Carpet Glue	4, 5, 6		
Cove Base Glue	7, 8, 9		
Concrete Block Wall	10, 11, 12		
Structural Fireproofing	13, 14, 15		
2'x2'x Dotted Ceiling Tile	16, 17, 18		
Fiberglass Pipe Wrap	19, 20, 21		
HVAC Seam Caulk	22, 23, 24		
Exterior Stucco	25, 26, 27		
Concrete Slab	28, 29, 30		
Asphalt	31, 32, 33		
Ceramic Wall Tile	34, 35, 36		
Ceramic Floor Tile	37, 38, 39		
Window Sealant	40,41,42		
Leveling Compound under Carpet	43,44,45		

GENERAL INFORMATION

Environmental Protection Agency (EPA)

According to the South Coast Air Quality Management District's Rule 1402paragraph (H)(2)(C), the analysis of composite samples of multi-layered material including, but not limited to, stucco (base and scratch coat) and wall systems is prohibited for the quantification of asbestos content. All separable layers shall be analyzed and reported separately for asbestos content.

These materials are eligible for analyzed using 1,000 Point Count with Gravimetric Reduction methods. Analysis would be conducted per strata and materials found to be greater than 0.1%

asbestos are regulated by OSHA and handled as asbestos containing until packaged and stored for disposal. Materials greater than 1% are regulated by EPA/APCD and would require disposal as asbestos containing material.

A material is considered by the EPA and the State of California to be asbestos-containing if at least one sample collected from the area shows asbestos present in an amount greater than one percent (> 1%).

California Occupational Safety & Health Agency (Cal/OSHA)

Title 8, California Code of Regulation 1529 defines asbestos-containing construction materials as materials containing greater than one-tenth of one percent (0.1%) asbestos by weight. Under this code, materials containing between 0.1% and 1% asbestos are regulated as other regulated operations. Although operations involving materials containing between 0.1% and 1% asbestos are not considered Class I, II, or III work, several sections of the standard are applicable, including negative exposure assessments and the use of regulated areas.

Laboratory analysis may report materials as "Trace Asbestos". These materials are assumed to be greater than 0.1%. Upon client request, these materials can be analyzed using 1,000 Point Count with Gravimetric Reduction methods. Materials found to be greater than 0.1% asbestos are regulated by OSHA and handled as asbestos containing until packaged and stored for disposal.

Please refer to the laboratory analysis for a more detailed description of the microscopic analysis of these samples.

Asbestos-containing materials (ACM) are regulated by federal, state, and local agencies, which include but may not be limited to the following:

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) requires an inspection for asbestos be done on facilities that are to undergo demolition or renovation work. Materials found to contain asbestos may need to be removed prior to the start of such demolition/renovation work.

NESHAP defines Category I non-friable asbestos-containing materials as gaskets, resilient floor covering, and asphalt roofing products that contain more than one percent asbestos, and Category II non-friable as any materials, except for Category I non-friable, that contain more than one percent asbestos and cannot be reduced to a powder by hand pressure when dry. NESHAP defines a Regulated Asbestos-Containing Material (RACM) as: (a) friable ACM, (b) Category I non-friable that has become friable, (c) Category I non-friable that has or may be subject to sanding, grinding, cutting, or abrading, and (d) Category II non-friable that may or has become friable during demolition or renovation.

SECTION 5 CONCLUSIONS & RECOMMENDATIONS

CONCLUSIONS

On this limited asbestos survey, materials observed and tested for asbestos were negative for asbestos content.

All layers of the roof was inaccessible at the time of the inspection. Roofing materials are assumed to contain asbestos until further testing can be determined otherwise.

RECOMMENDATIONS

If during renovation activities, materials other than the ones discussed in this report are observed, the materials should be tested for asbestos content prior to disturbance.

General

MTGL recommends that all asbestos containing materials be removed prior to any renovation and/or demolition activities, which may impact the materials. A Licensed Abatement Contractor in the State of California should perform the removal activities.

Removal of ACM/ACCM should be conducted in accordance with EPA and OSHA requirements for Federal, State and Local rules and regulations. All asbestos removal should be conducted using wet methods and engineering controls to reduce airborne fiber concentrations. OSHA required personal protective equipment must be used for worker protection.

All activities that may disturb or disrupt asbestos containing material must be conducted in properly demarcated regulated areas using wet removal methods.

Proper decontamination methods must be used by all workers entering and leaving regulated work areas where asbestos containing materials are being removed.

In the event ACM or ACCM materials are observed to be damaged and/or visible contamination is present, isolate the immediate area, turn off HVAC systems. Only properly trained and certified workers may enter the work area to conducted clean-up activities using wet methods.

If renovation and/or demolition activities do not impact the asbestos containing materials, then the materials can be managed in place. Periodic surveillance is recommended. An Operations & Maintenance (O&M) program should be established and conducted by properly trained personnel. Minimum training for each type of material that has been identified should be given as required by Cal/OSHA. Additionally, postings would be required in all publicly accessible areas warning of the potential hazard to satisfy the Proposition 65 & Hazard Communication regulations.

SECTION 6 APPENDICES

APPENDIX 1 ASBESTOS LABORATORY RESULTS & CHAIN OF CUSTODY



Report for:

Mr. Carl Tucker MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126

Eurofins EPK Built Environment Testing, LLC Project: Vanir Const. - OC Juvenile Hall; 331 The City of Orange B8 Regarding:

EML ID: 3593701

Approved by:

Dates of Analysis:

Asbestos PLM: 04-03-2024 and 04-04-2024

EMLab ID: 3593701, Page 1 of 13

Approved Signatory Carlos Rivadeneyra

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267) NVLAP Lab Code 500034-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Date of Sampling: 04-01-2024 Date of Receipt: 04-01-2024 Date of Report: 04-04-2024

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B8

ASBESTOS PLM REPORT

Total Samples Submitted: 45 **Total Samples Analyzed:** 45 **Total Samples with Layer Asbestos Content > 1%:** 0

Lab ID-Version : 17574375-1

Lab ID-Version 1: 17574376-1

EMLab ID: 3593701, Page 2 of 13

Location: 1, Drywall	Lab ID-Version‡: 17574373-1
Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
White Joint Compound	ND
White Paint	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

Location: 2, Drywall	Lab ID-Version‡: 17574374-1
Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
White Joint Compound	ND
White Paint	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

Location: 3. Drywall

Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
White Joint Compound	ND
White Paint	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

Location: 4. Sheet Vinyl Over Carpet Glue

= out of the state	•
Sample Layers	Asbestos Content
Yellow Mastic	ND
Brown Woven Material	ND
Gray Sheet Flooring	ND
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity:	Poor

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

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(800) 651-4802 www.eurofinsus.com/Built

EMLab ID: 3593701, Page 3 of 13

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B8

Date of Sampling: 04-01-2024 Date of Receipt: 04-01-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 5, Sheet Vinyl Over Carpet Glue

Lab ID-Version : 17574377-1 Sample Layers **Asbestos Content** Yellow Mastic (Trace) ND Brown Woven Material ND **Gray Sheet Flooring** ND **Composite Non-Asbestos Content:** 15% Cellulose **Sample Composite Homogeneity:** Poor

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Lab ID-Version †: 17574378-1

EMLab ID: 3593701, Page 4 of 13

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B8

Date of Sampling: 04-01-2024 Date of Receipt: 04-01-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 6. Sheet Vinyl Over Carnet Glue

Education: 0, Sheet vinyi over carpet diac	End 15 (Claim, 176, 1676)
Sample Layers	Asbestos Content
Yellow Mastic	ND
Brown Woven Material	ND
Gray Sheet Flooring	ND
Composite Non-Asbestos Conte	nt: 15% Cellulose
Sample Composite Homogenei	ity: Poor

Location: 7, Cove Base Glue Lab ID-Version 1: 17574379-1

Sample Layers	Asbestos Content
White Glue	ND
Sample Composite Homogeneity:	Good

Location: 8, Cove Base Glue Lab ID-Version 1: 17574380-1

Sample Layers	Asbestos Content
White Glue	ND
Sample Composite Homogeneity:	Good

Location: 9, Cove Base Glue Lab ID-Version 1: 17574381-1

Sample Layers	Asbestos Content
White Glue	ND
Sample Composite Homogeneity:	Good

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(800) 651-4802 www.eurofinsus.com/Built

Lab ID-Version‡: 17574382-1

Lab ID-Version 1: 17574384-1

EMLab ID: 3593701, Page 5 of 13

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B8

Date of Sampling: 04-01-2024 Date of Receipt: 04-01-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 10, Concrete Block Wall

Sample Layers	Asbestos Content
Gray Concrete	ND
White Paint	ND
Sample Composite Homogeneity: Moderate	

Location: 11, Concrete Block Wall	Lab ID-Version‡: 17574383-1
Sample Layers	Asbestos Content
Gray Concrete	ND
White Paint	ND
Sample Composite Homogeneity:	Moderate

Location: 12. Concrete Block Wall

Sample Layers	Asbestos Content
Gray Concrete	ND
White Paint	ND
Sample Composite Homogeneity: Moderate	

Location: 13, Structural Fireproofing	Lab ID-Version‡: 17574385-1
Sample Layers	Asbestos Content
Gray Fireproofing	ND
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity:	Good

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(800) 651-4802 www.eurofinsus.com/Built

Lab ID-Version 1: 17574388-1

Lab ID-Version 1: 17574389-1

EMLab ID: 3593701, Page 6 of 13

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B8

Date of Sampling: 04-01-2024 Date of Receipt: 04-01-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 14, Structural Fireproofing

Location: 14, Structural Fireproofing	Lab ID-Version‡: 17574386-1
Sample Layers	Asbestos Content
Gray Fireproofing	ND
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity:	Good

Location: 15, Structural Fireproofing	Lab ID-Version‡: 17574387-1
Sample Layers	Asbestos Content
Gray Fireproofing	ND
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity:	Good

Location: 16, 2'x2' Dotted Ceiling Tile

	•
Sample Layers	Asbestos Content
Gray Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	85% Cellulose
	10% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 17, 2'x2' Dotted Ceiling Tile

Sample Layers	Asbestos Content
Gray Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	
Comple Composite Homogoneiter	10% Glass Fibers
Sample Composite Homogeneity:	Good

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Lab ID-Version‡: 17574390-1

Lab ID-Version‡: 17574391-1

Lab ID-Version 1: 17574393-1

EMLab ID: 3593701, Page 7 of 13

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B8

Date of Sampling: 04-01-2024 Date of Receipt: 04-01-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 18, 2'x2' Dotted Ceiling Tile

	•
Sample Layers	Asbestos Content
Gray Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	85% Cellulose
	10% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 19, Fiberglass Pipe Wrap

Sample Layers	Asbestos Content
Silver Wrap	ND
Yellow Insulation	ND
Composite Non-Asbestos Content:	50% Glass Fibers 40% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 20, Fiberglass Pipe Wrap

Location: 20, Fiberglass Pipe Wrap	Lab ID-Version‡: 17574392-1
Sample Layers	Asbestos Content
Silver Wrap	ND
Yellow Insulation	ND
Composite Non-Asbestos Content:	
	40% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 21. Fiberglass Pipe Wrap

= 000010110 = 1,110 01 81000 1 1P 0 11 10 P	•
Sample Layers	Asbestos Content
Silver Wrap	ND
Yellow Insulation	ND
Composite Non-Asbestos Content:	50% Glass Fibers
_	40% Cellulose
Sample Composite Homogeneity:	Moderate

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9445 Farnham Street, Suite 103, San Diego, CA 92123

Date of Sampling: 04-01-2024

(800) 651-4802 www.eurofinsus.com/Built

Lab ID-Version 1: 17574395-1

Lab ID-Version 1: 17574396-1

EMLab ID: 3593701, Page 8 of 13

Client: MTGL, Inc. C/O: Mr. Carl Tucker Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Date of Receipt: 04-01-2024 Orange B8 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 22, HVAC Seam Caulk Lab ID-Version : 17574394-1

Sample Layers	Asbestos Content
Gray Caulk	ND
Sample Composite Homogeneity:	Good

Location: 23, HVAC Seam Caulk

Sample Layers	Asbestos Content
Gray Caulk	ND
Sample Composite Homogeneity:	Good

Location: 24, HVAC Seam Caulk

Sample Layers	Asbestos Content
Gray Caulk	ND
Sample Composite Homogeneity:	Good

Location: 25, Exterior Stucco	Lab ID-Version‡: 17574397-1
Sample Layers	Asbestos Content
Dark Gray Stucco	ND
Light Gray Stucco	ND
Sample Composite Homogeneity: Moderate	

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Lab ID-Version 1: 17574398-1

EMLab ID: 3593701, Page 9 of 13

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B8

Date of Sampling: 04-01-2024 Date of Receipt: 04-01-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 26. Exterior Stucco

Education 20, Exterior States	
Sample Layers	Asbestos Content
Dark Gray Stucco	ND
Light Gray Stucco	ND
Composite Non-Asbestos Content: 5% Glass Fibers	
Sample Composite Homogeneity:	Moderate

Location: 27, Exterior Stucco	Lab ID-Version‡: 17574399-1
Sample Layers	Asbestos Content
Dark Gray Stucco	ND
Light Gray Stucco	ND
Sample Composite Homogeneity:	Moderate

Location: 28, Concrete Slab

Location: 28, Concrete Slab	Lab ID-Version‡: 17574400-1
Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 29, Concrete Slab	Lab ID-Version‡: 17574401-1
Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

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Client: MTGL, Inc. C/O: Mr. Carl Tucker Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B8

Date of Sampling: 04-01-2024 Date of Receipt: 04-01-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 30, Concrete Slab Lab ID-Version : 17574402-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 31, Asphalt Lab ID-Version : 17574403-1

Sample Layers	Asbestos Content
Black Asphalt	ND
Sample Composite Homogeneity:	Good

Location: 32, Asphalt Lab ID-Version : 17574404-1

Sample Layers	Asbestos Content
Black Asphalt	ND
Sample Composite Homogeneity:	Good

Location: 33, Asphalt Lab ID-Version‡: 17574405-1

Sample Layers	Asbestos Content
Black Asphalt	ND
Sample Composite Homogeneity:	Good

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Lab ID-Version‡: 17574406-1

Lab ID-Version : 17574407-1

Lab ID-Version 1: 17574408-1

Client: MTGL, Inc. C/O: Mr. Carl Tucker Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B8

Date of Sampling: 04-01-2024 Date of Receipt: 04-01-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 34, Ceramic Wall Tile

Sample Layers	Asbestos Content
White Ceramic Tile	ND
Sample Composite Homogeneity:	Good

Location: 35. Ceramic Wall Tile

Sample Layers	Asbestos Content
Brown Mastic (Trace)	ND
White Ceramic Tile	ND
Sample Composite Homogeneity: Moderate	

Location: 36. Ceramic Wall Tile

Sample Layers	Asbestos Content
White Ceramic Tile	ND
Sample Composite Homogeneity:	Good

Location: 37, Ceramic Floor Tile	Lab ID-Version‡: 17574409-1
Sample Layers	Asbestos Content
Beige Ceramic Tile	ND
Sample Composite Homogeneity:	Good

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Lab ID-Version : 17574412-1

Lab ID-Version †: 17574413-1

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B8

Date of Sampling: 04-01-2024 Date of Receipt: 04-01-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 38, Ceramic Floor Tile

Location: 38, Ceramic Floor Tile	Lab ID-Version‡: 17574410-1
Sample Layers	Asbestos Content
Beige Ceramic Tile	ND
Sample Composite Homogeneity:	Good

Location: 39, Ceramic Floor Tile	Lab ID-Version‡: 1757441						
Sample Layers	Asbestos Content						
Beige Ceramic Tile	ND						
Sample Composite Homogeneity:	Good						

Location: 40, Window Sealant

Sample Layers	Asbestos Content
Green Sealant	ND
Sample Composite Homogeneity:	Good

Location: 41 Window Sealant

Location: 41, White W Scalant	240 12 Version 4. 1707 VIII 1
Sample Layers	Asbestos Content
Green Sealant	ND
Sample Composite Homogeneity:	Good

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Lab ID-Version 1: 17574415-1

Lab ID-Version 1: 17574416-1

Client: MTGL, Inc. C/O: Mr. Carl Tucker Date of Sampling: 04-01-2024 Re: Vanir Const. - OC Juvenile Hall; 331 The City of Date of Receipt: 04-01-2024

Orange B8 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 42, Window Sealant Lab ID-Version : 17574414-1

Sample Layers	Asbestos Content
Green Sealant	ND
Sample Composite Homogeneity:	Good

Location: 43. Leveling Compound

Zocation, 10, 20 compound	
Sample Layers	Asbestos Content
Yellow Mastic	ND
Gray Leveling Compound	ND
Sample Composite Homogeneity:	Moderate

Location: 44. Leveling Compound

	·
Sample Layers	Asbestos Content
Yellow Mastic	ND
Gray Leveling Compound	ND
Sample Composite Homogeneity:	Moderate

Location: 45, Leveling Compound	Lab ID-Version‡: 17574417						
Sample Layers	Asbestos Content						
Yellow Mastic	ND						
Gray Leveling Compound	ND						
Sample Composite Homogeneity:	Moderate						

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CHAIN OF CUSTODY 🔆 eurofins

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Built Environment Testing

٧	VEATHER	Fog	Rain	Snow	Wind	Clear
- 6	None					
딦	Light					
M	Moderate					
	Heavy					

REC BioCas

Non-Culturable

Tape,

003593701

East: (866) 871-1984 Swab, Bulk Trap Central: (800) 651-4802 West: (866) 888-6653 CONTACT INFORMATION MTGLI Inc. Company CARLTUCKEL Contact: 1-19-454-7851 Phone: TURN AROUND TIME CODES - (TAT) PROJECT INFORMATION Rushes received after 2pm OCJuvenile Hal STD - Standard (Default) Vanir Coust .or on weekends, will be Project ID: ND - Next Business Day 331 The City of crange considered received the Project next business day. Please Description: SD - Same Business Day alert us in advance of Project Date/Time: Zig Code weekend analysis needs WH - Weekend/Holiday/ASAP 5DRE-24-061.1CT BY PO Number Total Sample NOTES TAT Volume/Area (Time of day, Temp, RH, etc.) Type DESCRIPTION (Above) SAMPLE ID (as applicable) (Below) Short Vinyl over Carpet Come Base Che Concrete Black Wall Structural Five product 12 13 DATE & TIME RECEIVED BY DATE & TIME RELINQUISHED BY SAMPLE TYPE CODES O - Other: CP - Contact Plate T - Tape BC - BioCassette SW - Swab ST - Spore Trap A1S - Andersen SO - Soil B - Bulk SAS - Surface Air Sampler D - Dust P - Potable Water

		STODY & eurofins	att Environmer	of Testin	WEATHER None	Fog Rain	Snow Wind Clear	nd Clear												
Www.eurofinsus.com/Built East: (866) 871-1984 Central: (800) 651-4802 West: (866) 888-6653							Spo	non-Culturab pore Tape rap Swab, 8			BioC Sea	0	035	93	70	1		N		
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Project ID: Vanir Coxst OC Juvenile Hall STD Standard Project 331 The City of Cronge B-8 ND Next Busin Project 92868 Sampling Date Time: 5 41/24 SD Same Bus		ndard (Default) Business Day	Or on weekends, will be considered received the next business day. Please aiert us in advance of		ap Analysis	olddos - salo	live spore count direct exam	racterization	2	able Air Fungi (Genes ID + A: Stain and Counts (Culturable	a outture from, E coli (Presence:Ab	Sewage	(pease specify lest)	in Air - PCM Airborne Flb.	Buth - PLM	ase specify lest)	s (please specifly test)			
SAMPLE I	ID	DESCRIPTION	Sample Type (Below)	TAT (Above)	Total Volume/Area (as applicable)		OTES Temp, RH, etc.)	Spore Tra	Other bio	Ouantitat	Dust Cha	edia	Gram Sta	Legionell Total Col	QuantiTray	OTHER	Asbestos	Asbesios	PCR (ple	Allergens (pleaso
272901234547890		Fiberglass Pipe was HVAC Seam Caul Exterior Stuces Concrete That		STD .	~1"2					,										
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BC - BioCesser A1S - Anderser SAS - Surface NP - Non-potat	n Air Sar	경영병에 하는 경영화가 모든 모든 그리고 함께 되었다.	O - Other:	Cus	shall the	Sme	4/1/24				(0	2	_	-		4,	11	50	2

HAIN OF C	COM/Built eurofins	Environm	ent Testin	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	R Fog Rain	Snow Wind Clear			-		EQUE			
est: (866) 871-1984 Intral: (800) 651-4802 est: (866) 888-6653							Spor		ape, b. Bui	Bio	Casset sb, Wa C	00	359	3701
	CONTAC	TINFORMA	ATION								eria	I	H	6
ntact CA	ATGIITAC. ARLTUCKIL 9-454-7851	Address: 7 Special Instr	742 A	trjons Dr	z.,San Die	9192126				(ridds ridds)	φ spp.) Alt and Surface Bacteria	ence)		Court (NIOSH, 740
	PROJECT INFORMATION			TURN AROUND	TIME CODES -	(TAT)	l limited	ative	exam	+	Asp ble Al	/Abse		Fiber
cription: 3	anir Coust Oc Juvenile 31 The City of cronge 2868 Barding Date/Time: Sampled By: City: C	Hall B8 124	ND - Next SD - Same	ndard (Default) Business Day Business Day kend/Holiday/AS/	or on we consider next busin alert us	ceived after 2pm ekends, will be ed received the less day. Please in advance of analysis needs.	ap Analysis	отовкоріс Екат	live spore dount direct exami eaclerization	Surface Fungi (Genus	e Air Fungi (Genus ID + As ain and Counts (Culturable	nella culture Coliform, E coli (Preseno	Quantifray-Sewage Screen OTHER (please specify test)	Asbestos in Air - PCM Alrhome Asbestos Bulk - PLM Lead (Pb) - Flame AA PCR (please specify lest)
SAMPLE ID	DESCRIPTION	Sample Type (Below)	TAT (Above)	Total Volume/Area (as applicable)		TES Temp, RH, etc.)	Spore Tra	Direct Mk	Quantital Dust Cha	1-Media	Culturable Gram Sta	Legionelli Total Col	Ouantitie OTHER.	Asbestos Asbestos Lead (Pb PCR (ples Allerberts
からからいかのかり かっちょう	Ceramic Wall 776 Ceramic Floor 776	1	7											
340412	Window Sealant Leveling Compound	1	1,	1		1								Ì
43	Leveling Conformed				under	aspt								
- BioCassetter" S - Andersen S - Surface Air S	SAMPLE TYPE CODES CP - Contact Plate T - Tape ST - Spore Trap SW - Swab Sampler B - Bulk SO - Soil	O - Other:	Mic	RELINQUISHE hello Eking UChelle E		4/1/24			RE	CEIV	ED BY	Y		DATE & TIME A 1/12 1550

United States Department of Commerce National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 500034-0

Eurofins EMLab P&K

San Diego, CA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2024-01-01 through 2024-12-31

Effective Dates



For the National Voluntary Laboratory Accreditation Program



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Eurofins EMLab P&K

9445 Farnham St #103 San Diego, CA 92123 Quynh Nguyen Phone: 800-651-4802

Email: quynh.nguyen@et.eurofinsus.com https://www.eurofinsus.com/environment-testing/

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 500034-0

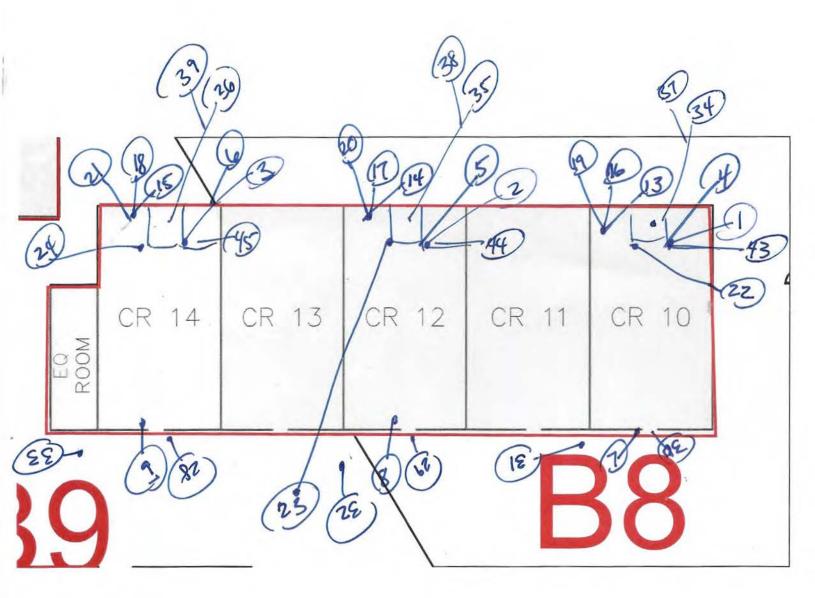
Bulk Asbestos Analysis

<u>Code</u>	<u>Description</u>
18/A01	EPA 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

For the National Voluntary Laboratory Accreditation Program

APPENDIX 2

SAMPLE LOCATION MAP (NOT TO SCALE)

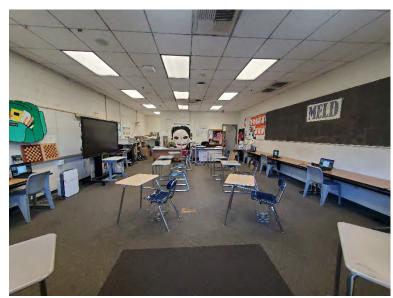


APPENDIX 3 PHOTO DOCUMENTATION

Building 8



1. Exterior



2. Typical View of Classrooms



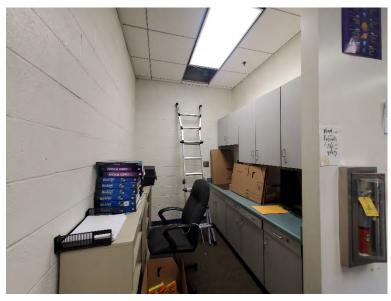
3. View of Classrooms



4. View of Classrooms Facing Entry



5. Typical View of Restrooms



6. Typical View of Kitchenette



7. View Above Ceiling Tiles



approximately 6-8 inches of Styrofoam.

9. View of Roof with vinyl cap, gypsum and



10. View of roof core.



11. View of Roof.

APPENDIX 4 INSPECTOR CERTIFICATIONS

California Certified Asbestos Consultant (CAC)

Card Holder: <u>Michelle Ehresman</u>

Certification Number: <u>14-5323</u> Exp.: <u>11/19/2024</u>

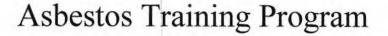
Current Employer: MTGL, Inc.

Supporting Certifications:

AHERA Contractor/Supervisor Refresher Certification
 AHERA Building Inspector Refresher Certification
 AHERA Management Planner Refresher Certification
 AHERA Project Designer Refresher Certification
 Exp. 7/27/2024
 Exp. 7/27/2024
 Exp. 8/16/2024



MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126 858-537-3999



This is to certify

Michelle Ehresman 1656

Has successfully completed 8 hours of formal training required by section 206 of TSCA II entitled

Contractor/Supervisor Refresher

Presented By **Environmental Compliance Training** PO BOX 16555 San Diego, CA. 92176-6555

(858) 558-7465

Director:

Walter T. Amenta, CIH, Approval Number CA-029-04

Class Dates:

06-24-2023

Exam Date:

n/a

Expiration Date: 06-24-2024

Certification Number: 0623ABCA167303

Certificate Of Completion

Asbestos Building Inspector Refresher Course

DOSH #: CA-015-06

Michelle Ehresman

ABIR0727230010N35227

David Wallach

Principal Instructor

7/27/2023

Course Start Date

7/27/2023

Course End Date

Michael W. Horner

Training Director

7/27/2023 Exam Date 7/27/2024

Expiration Date

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



NATEC International, Inc.

National Association of Training and Environmental Consulting



TIONAL 1100 Technology Circle, Suite A, Anaheim, CA 92805 · www.natecintl.com · 800-969-3228

Important Industry Contacts

CAL-OSHA:

Ph# (916) 574-2993

(916) 483-0572 Fax Notification Web: www.dir.ca.gov or calosha.com

CDPH/CLPPB:Ph# (510) 620-5600

Web: www.cdph.ca.gov/programs/CLPPB

SCAQMD:

Ph# (909) 396-3739

Fax#(909) 396-3342

BAAOMD:

Ph# (415) 749-4762

NATEC International, Inc.

National Association of Training and Environmental Consulting

Asbestos · Lead · Mold · HAZWOPER

PO Box 8657, Fountain Valley, CA 92728 (714) 678-2750, (800) 969-3228, Fax (714) 678-2757 www.natecintl.com

NATEC International, Inc.

National Association of Training and Environmental Consulting

This Card Acknowledges That Michelle Ehresman

Holds Training Certification For Asbestos Building Inspector Refresher Course

Expiration: 7/27/2024

ABIR0727230010N35227

Michael W. Horner Training Director

Certificate Of Completion

Asbestos Project Designer Refresher Course

DOSH #:CA-015-10

Michelle Ehresman

APDR0816230004N35415

Norm Kramer

Principal Instructor

8/16/2023 Course Start Date 8/16/2023

Course End Date

8/16/2023

Exam Date

Michael W. Horner

Training Director

8/16/2024

Expiration Date

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



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SCAQMD:

Ph# (909) 396-3739 Fax#(909) 396-3342

BAAQMD:

Ph# (415) 749-4762

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NATEC International, Inc.

National Association of Training and Environmental Consulting
*Note: Card is not suitable substitute for certificate and is not accepted by SCAQMD as proof of
certification
This Card Askinguidades That

This Card Acknowledges That Michelle Ehresman

Holds Training Certification For Asbestos Project Designer Refresher Course

Expiration: 8/16/2024

Training Date 8/16/2023 APDR0816230004N35415

Michael W. Horner Training Director

Certificate Of Completion

Asbestos Management Planner Refresher Course

DOSH #:CA-015-08

Michelle Ehresman

AMPR0727230007N35357

David Wallach

Principal Instructor

7/27/2023

Course Start Date

7/27/2023

Course End Date

7/27/2023 Exam Date

Training Director

Michael W. Horner

7/27/2024 **Expiration Date**

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



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NATEC International, Inc.

National Association of Training and Environmental Consulting

This Card Acknowledges That Michelle Ehresman

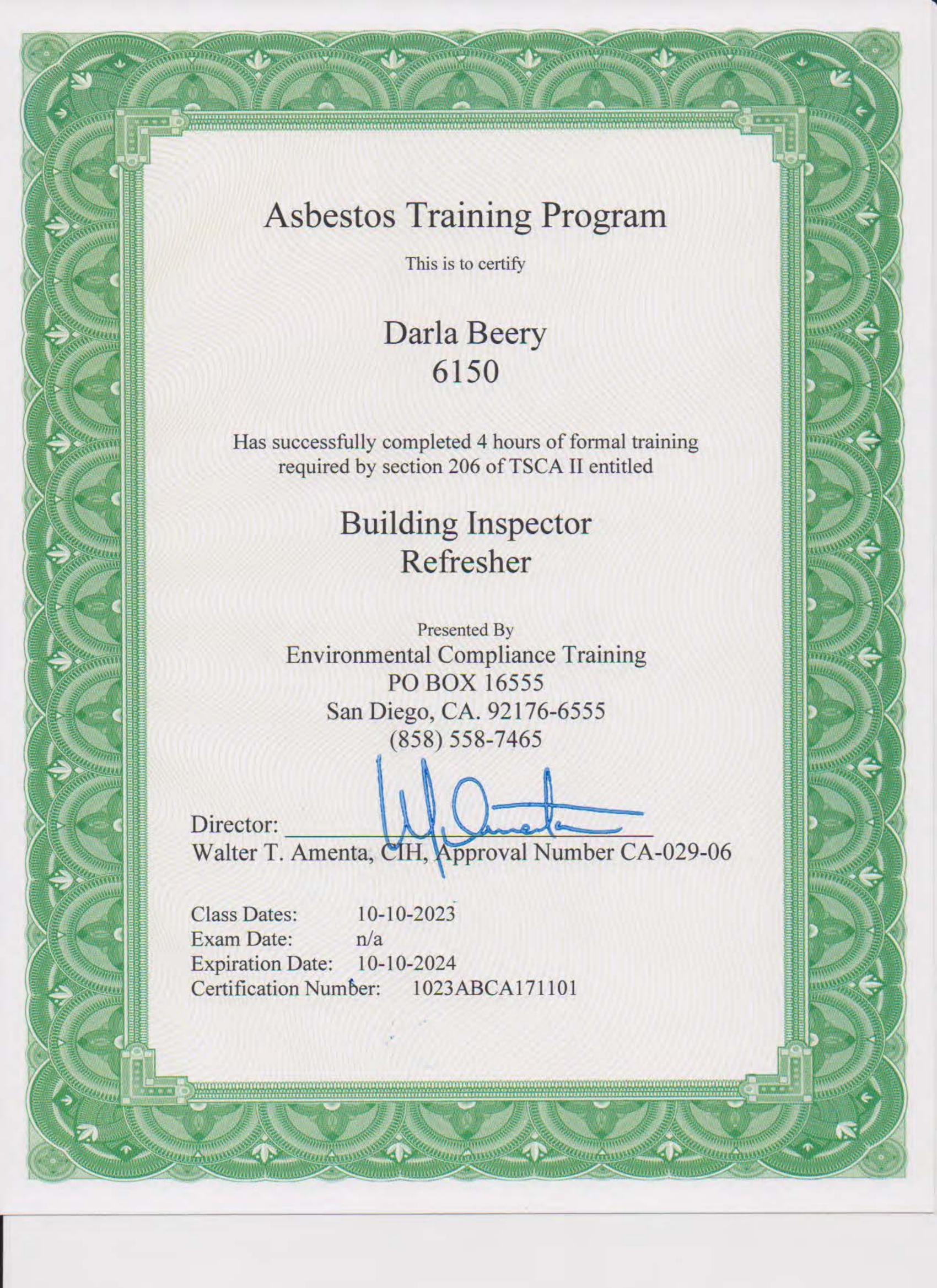
Holds Training Certification For Asbestos Management Planner Refresher Course

Expiration: 7/27/2024

7/27/2023 Training Date AMPR0727230007N35357 Certificate No.

Michael W. Homer Training Director

Darla Beery AHERA Building Inspector Certification





Geotechnical Engineering Construction Inspection Materials Testing Environmental

Office Locations

Orange County Corporate Branch

2992 E. La Palma Avenue

Suite A Anaheim, CA 92806

Tel: 714.632.2999 Fax: 714.632.2974

San Diego Imperial County

7742 Arjons Drive

San Diego, CA 92126

Tel: 858.537.3999 Fax: 858.537.3990

Inland Empire

14467 Meridian Pkwy. Building 2A Riverside, CA 92553

Tel: 951.653.4999 Fax: 951.653.4666

Central Dispatch

888.844.5060

www.mtalinc.com

Mr. Scott Battles June 21, 2024

Vanir Construction Management, Inc. 4540 Duckhorn Drive, Suite 300 Sacramento, CA 95834

Subject: Addendum to Asbestos Survey Report: Orange County Juvenile Hall

Building 8

Dated April 18, 2024

Re: Orange County Juvenile Hall-Building 4-Roof Inspection

331 The City Drive, S Orange, California 92868

Dear Mr. Battles:

On June 6, 2024, MTGL conducted an inspection of suspect roofing materials that were noted to be inaccessible in the Asbestos Survey Report, dated April 18, 2024. Michelle Ehresman, an AHERA Building Inspector (#ABIR0727230010N35227) and Certified Asbestos Consultant (#14-5323) collected a total of six (6) bulk samples and submitted the material to Eurofins EMLab P&K, San Diego, California for analysis and evaluation of asbestos content using EPA Method 600/R-93/116, Polarized Light Microscopy.

The material was in good condition at the time of the inspection.

SUMMARY OF SAMPLING & ANALYTIC RESULTS. The following table summarizes the laboratory's analytical results:

Asbestos:

Sample ID	Sample Matrix	Location	Analytic Result*
1, 2, 3	Vinyl Capped Roof (Multi-layer)	Roof	No Asbestos Detected

GENERAL INFORMATION

Environmental Protection Agency (EPA)

According to the South Coast Air Quality Management District's Rule 1402 paragraph (H)(2)(C), the analysis of composite samples of multi-layered material including, but not limited to, stucco (base and scratch coat) and wall systems is prohibited for the quantification of asbestos content. All separable layers shall be analyzed and reported separately for asbestos content.

These materials are eligible for analyzed using 1,000 Point Count with Gravimetric Reduction methods. Analysis would be conducted per strata and materials found to be greater than 0.1% asbestos are regulated by OSHA and handled as asbestos containing until packaged and stored

for disposal. Materials greater than 1% are regulated by EPA/APCD and would require disposal as asbestos containing material.

A material is considered by the EPA and the State of California to be asbestos-containing if at least one sample collected from the area shows asbestos present in an amount greater than one percent (> 1%).

California Occupational Safety & Health Agency (Cal/OSHA)

Title 8, California Code of Regulation 1529 defines asbestos-containing construction materials as materials containing greater than one-tenth of one percent (0.1%) asbestos by weight. Under this code, materials containing between 0.1% and 1% asbestos are regulated as other regulated operations. Although operations involving materials containing between 0.1% and 1% asbestos are not considered Class I, II, or III work, several sections of the standard are applicable, including negative exposure assessments and the use of regulated areas.

Laboratory analysis may report materials as "Trace Asbestos". These materials are assumed to be greater than 0.1%. Upon client request, these materials can be analyzed using 1,000 Point Count with Gravimetric Reduction methods. Materials found to be greater than 0.1% asbestos are regulated by OSHA and handled as asbestos containing until packaged and stored for disposal.

Please refer to the laboratory analysis for a more detailed description of the microscopic analysis of these samples.

Asbestos-containing materials (ACM) are regulated by federal, state, and local agencies, which include but may not be limited to the following:

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) requires an inspection for asbestos be done on facilities that are to undergo demolition or renovation work. Materials found to contain asbestos may need to be removed prior to the start of such demolition/renovation work.

NESHAP defines Category I non-friable asbestos-containing materials as gaskets, resilient floor covering, and asphalt roofing products that contain more than one percent asbestos, and Category II non-friable as any materials, except for Category I non-friable, that contain more than one percent asbestos and cannot be reduced to a powder by hand pressure when dry. NESHAP defines a Regulated Asbestos-Containing Material (RACM) as: (a) friable ACM, (b) Category I non-friable that has become friable, (c) Category I non-friable that has or may be subject to sanding, grinding, cutting, or abrading, and (d) Category II non-friable that may or has become friable during demolition or renovation.

CONCLUSIONS

The roofing materials and pipe coating material observed and tested for asbestos was negative for asbestos content.

RECOMMENDATIONS

If during renovation activities, materials other than the ones discussed in this report are observed, the materials should be tested for asbestos content prior to disturbance.

INVESTIGATION LIMITATIONS

MTGL, Inc. did not conduct testing within interstitial wall cavities, ceiling plenums, HVAC ventilation systems or crawlspaces or other locations of the facility, outside of the Client specified areas.

The findings of this report are valid as of the date of the survey and sample collection. Changes in the condition of the property can occur with passage of time, whether they are due to natural processes or the works of man on this or adjacent properties. In addition, changes in the state-of-art technology and/or government codes may occur. Due to such changes, the findings of this report may be invalidated wholly or in part by conditions beyond our control. Due to changes that can occur over time, submittals of this report to Regulatory Agencies may require additional site visits and assessment to document current conditions.

The final assessment of the potential for the existence of hazardous contaminants at the site should be considered a professional opinion based on the data obtained during the investigation and should not be considered a definitive statement that a hazardous contaminant or conditions are, or is not, present in the area of study. These opinions have been derived in accordance with current standards of practice.

This report is intended solely for use by the parties to whom it is addressed. This report is not intended for and may not contain sufficient information for purposes other than qualitative evaluation of asbestos or conditions at the time of our evaluation. Reliance on this report for other purposes or by other parties shall be at the user's sole risk.

WARRANTY

MTGL, Inc. warrants that the findings contained herein have been prepared with the level of care and skill exercised by experienced and knowledgeable environmental consultants who are appropriately licensed or otherwise trained to perform asbestos inspections and assessments pursuant to the scope of work required on this project. MTGL's Asbestos Survey Reports are prepared by trained certified professionals without a conflict of interest in the demolition(s) or renovation project(s) as per the Business and Professions Code 7180 (BP7180).

MTGL, Inc. warrants that the findings contained herein have been prepared in general accordance with accepted professional practices as applied by similar professionals in the community at the time of its preparation. Changes in the state of the art or in applicable regulations cannot be anticipated and have not been addressed in this report.

The survey included inspection of visible and accessible materials. MTGL did not inspect or sample inaccessible areas and did not dismantle any part of the structure to survey inaccessible areas. For the purpose of this warranty, inaccessible is defined as areas that could not be tested (sampled) without destruction of the structure or a portion of the structure. Inaccessible materials that are visible to MTGL's inspectors shall be assumed to be asbestos containing. No other warranty is expressed, or implied.

MTGL, Inc. appreciates the opportunity to be of service. If you have any questions or require additional information, please contact us at (858) 537-3999.

Sincerely, MTGL, INC

Michelle Ehresman, CAC 14-5323

Industrial Hygiene Services

Attachments:

Attachment 1: Laboratory Report and Chain of Custody Attachment 2: Sample Location Map Attachment 3: Inspector Certifications

Attachment 1

Laboratory Report Chain of Custody



Report for:

Mr. Carl Tucker MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126

Regarding: Eurofins EPK Built Environment Testing, LLC Project: VANIR - OC Juvenile Hall; Bldg. 8 Roof

EMĹ ID: 3669838

Approved by:

Approved Signatory Carlos Rivadeneyra Dates of Analysis: Asbestos PLM: 06-12-2024

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267) NVLAP Lab Code 500034-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Eurofins EPK Built Environment Testing, LLC

9445 Farnham Street, Suite 103, San Diego, CA 92123

(833) 465-5857 www.eurofinsus.com/Built

Client: MTGL, Inc. Date of Sampling: 06-06-2024 C/O: Mr. Carl Tucker Date of Receipt: 06-07-2024 Re: VANIR - OC Juvenile Hall; Bldg. 8 Roof Date of Report: 06-12-2024

ASBESTOS PLM REPORT

Total Samples Submitted: 3

Total Samples Analyzed: 3

Lab ID Version +: 17082430 1

Lab ID-Version : 17982432-1

EMLab ID: 3669838, Page 2 of 2

Total Samples with Layer Asbestos Content > 1%: 0

Location: 1 Vinyl Canned Roof

Location: 1, vinyi Capped Rooi	Lau ID- version ₄ . 17902450-1						
Sample Layers	Asbestos Content						
White Foam	ND						
Off-White Roofing Material	ND						
Composite Non-Asbestos Content:	3% Glass Fibers						
Sample Composite Homogeneity:	Moderate						

Location: 2, Vinyl Capped Roof

Location: 2, Vinyl Capped Roof	Lab ID-Version‡: 17982431-1					
Sample Layers	Asbestos Content					
White Foam	ND					
Yellow Mastic	ND					
Off-White Roofing Material	ND					
Composite Non-Asbestos Content:	3% Glass Fibers					
Sample Composite Homogeneity:	Moderate					

Location: 3, Vinyl Capped Roof

Sample Layers	Asbestos Content
White Foam	ND
Yellow Mastic	ND
Off-White Roofing Material	ND
Composite Non-Asbestos Content:	3% Glass Fibers
Sample Composite Homogeneity:	Moderate

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

CHAIN OF CUSTODY 💸 eurofins

www.eurofinsus.com/Built

East: (866) 871-1984

Built Environment Testing

WEATHER Fog Rain Snow Wind Clear None LEVEL Light Moderate

REQU	And the second s
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ioCass	
The second second	DESCRIPTION OF THE PROPERTY OF

Non-Culturable

BioCass

East: (866) Central: (80 West: (866)	00) 651-4802						Heavy	ite		pore rap	Ta Swat	pe, Bull	Cur	Cass ab, V	Ċ)03	669	983	38		2.10/400	
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Company:	MTG	H.TW.		A	ddress: 7	742	4nous DI	R. San Digort						6	e Da				H 74			
Contact:	CAR	4, IN. 4 tucke 454-183	-1	S	pecial Instru	uctions:	142 Arjons DR. San Digg						p. spp.)	Culturable Air Fungi (Genus ID + Asp. spp.)	and Surrac	(ec)			Count (NIOSH 7400)			
TIONE.	10.1	PROJECT INFOR				uras inca	TURN AROUND	TIME CODES - (TAT)		neut	(e)		+ As	Asp.	2	pseu			Fiber O			
Project ID:	VAN	IR-OC_	Javen		11	-	TURN AROUND TIME CODES - (TAT) STD - Standard (Default) Rushes received after 2pm or on weekends, will be			- suppler	Exam (Qualiflative)		(Genus ID + Asp	Fungi (Genus ID + A	Calman	esence/A	en (lest)	d social	stos in Air - PCM Airbarne Fil			(test)
Description:	b.	Bldg. 8	Root			ND - Nex	ND - Next Business Day considered received the			ticles	Exam	c		(Ger	S	(P.	Screen scify test	Fund	M Air	_ 4	test	ecifiy
Project Zip Code:	TB 92		/Time:	62	4	SD - Sam	ne Business Day	next business day. Please alert us in advance of	alysis	l parl	scopic E	rizatio	교	Fung	a a	E 20	wage		- PG	PLA	pecify	se sp
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SAMPL	LE ID	DESCI	RIPTION		Sample Type (Below)	TAT (Above)	Total Volume/Area (as applicable)	NOTES (Time of day, Temp, RH, etc.)	Spore Trap	Other biological particles - supplement	Direct Micros	Dust Characterization	1-Media Surface Fungi	Culturable Air	Legionella	Total Coliform, E.coli (Presence/Absence)	QuantiTray-Sewage Screen OTHER: (please specify test)	0	Aspestos	Asbestos Bulk - PLM Lead (Pb) - Flame AA	PCR (please specify test)	Allergens (please specify
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SAS - Surfa	ice Air Sampl	er B - Bulk	so - s	Soil		_ /	michile	lucsma									200 E			17 17	11000	
NP - Non-po	otable Water	P - Potable Wa	ater D - Du	ıst					⅃Ĺ													

United States Department of Commerce National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 500034-0

Eurofins EMLab P&K

San Diego, CA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2024-01-01 through 2024-12-31

Effective Dates



For the National Voluntary Laboratory Accreditation Program



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Eurofins EMLab P&K

9445 Farnham St #103 San Diego, CA 92123 Quynh Nguyen Phone: 800-651-4802

Email: quynh.nguyen@et.eurofinsus.com https://www.eurofinsus.com/environment-testing/

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 500034-0

Bulk Asbestos Analysis

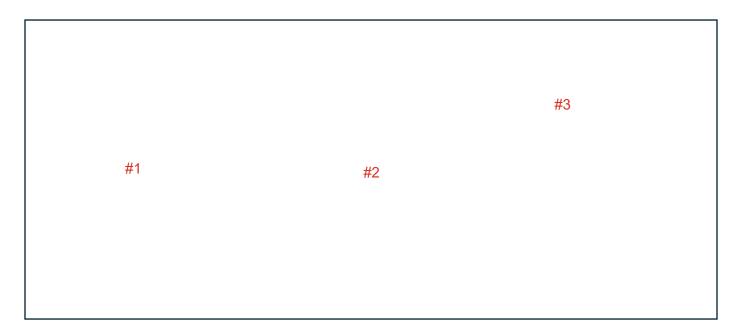
<u>Code</u>	<u>Description</u>
18/A01	EPA 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

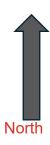
For the National Voluntary Laboratory Accreditation Program

APPENDIX 2

SAMPLE LOCATION MAP (NOT TO SCALE)

Building 8 Roof





APPENDIX 3 INSPECTOR CERTIFICATIONS

California Certified Asbestos Consultant (CAC)

Card Holder: <u>Michelle Ehresman</u>

Certification Number: <u>14-5323</u> Exp.: <u>11/19/2024</u>

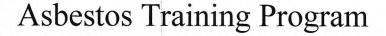
Current Employer: MTGL, Inc.

Supporting Certifications:

AHERA Contractor/Supervisor Refresher Certification
 AHERA Building Inspector Refresher Certification
 AHERA Management Planner Refresher Certification
 AHERA Project Designer Refresher Certification
 Exp. 7/27/2024
 Exp. 8/16/2024



MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126 858-537-3999



This is to certify

Michelle Ehresman 1656

Has successfully completed 8 hours of formal training required by section 206 of TSCA II entitled

Contractor/Supervisor Refresher

Presented By

Environmental Compliance Training PO BOX 16555 San Diego, CA. 92176-6555 (858) 558-7465

Director: Walter T. Amenta, CIH, Approval Number CA-029-04

Class Dates: 06-24-2023 Exam Date: n/a

Expiration Date: 06-24-2024

Certification Number: 0623ABCA167303

Certificate Of Completion

Asbestos Building Inspector Refresher Course

DOSH #: CA-015-06

Michelle Ehresman

ABIR0727230010N35227

David Wallach

Principal Instructor

7/27/2023

Course Start Date

7/27/2023

Course End Date

Michael W. Horner
Training Director

7/27/2023

Exam Date

7/27/2024

Expiration Date

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



NATEC International, Inc.

National Association of Training and Environmental Consulting



1100 Technology Circle, Suite A, Anaheim, CA 92805 · www.natecintl.com · 800-969-3228

Important Industry Contacts

CAL-OSHA: Ph# (916) 574-2993

(916) 483-0572 Fax Notification Web: www.dir.ca.gov or calosha.com

CDPH/CLPPB:Ph# (510) 620-5600

Web: www.cdph.ca.gov/programs/CLPPB

SCAQMD:

Ph# (909) 396-3739 Fax#(909) 396-3342

BAAQMD:

Ph# (415) 749-4762

NATEC International, Inc.

National Association of Training and Environmental Consulting

Asbestos · Lead · Mold · HAZWOPER

PO Box 8657, Fountain Valley, CA 92728 (714) 678-2750, (800) 969-3228, Fax (714) 678-2757 www.natecintl.com

NATEC International, Inc.

National Association of Training and Environmental Consulting
*Note: Card is not suitable substitute for certificate and is not accepted by SCAQMD as proof of
certification

This Card Ask power days. That

This Card Acknowledges That Michelle Ehresman

Holds Training Certification For Asbestos Building Inspector Refresher Course

Expiration: 7/27/2024

Training Date $\frac{7/27/2023}{ARIPO737}$

ABIR0727230010N35227

Michael W. Horner Training Director

Certificate Of Completion

Asbestos Project Designer Refresher Course

DOSH #:CA-015-10

Michelle Ehresman

APDR0816230004N35415

Norm Kramer

Principal Instructor

8/16/2023

Course Start Date

8/16/2023

Course End Date

Michael W. Horner Training Director

> 8/16/2023 Exam Date

8/16/2024

Expiration Date

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



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National Association of Training and Environmental Consulting



TIONAL 1100 Technology Circle, Suite A, Anaheim, CA 92805 • www.natecintl.com • 800-969-3228

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SCAQMD:

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certification
This Cord Asknowledges That

This Card Acknowledges That Michelle Ehresman

Holds Training Certification For Asbestos Project Designer Refresher Course

Expiration: 8/16/2024

aining Date 8/16/2023 APDR0816230004N35415

Michael W. Horner Training Director

Certificate Of Completion

Asbestos Management Planner Refresher Course

DOSH #: CA-015-08

Michelle Ehresman

AMPR0727230007N35357

David Wallach

Principal Instructor

7/27/2023

7/27/2023

7/27/2024

7/27/2023 Course Start Date

Course End Date

Exam Date

Training Director

Michael W. Horner

Expiration Date

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



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NATEC International, Inc.

National Association of Training and Environmental Consulting *Note: Card is not suitable substitute for certificate and is not accepted by SCAQMD as proof of certification.

This Card Acknowledges That Michelle Ehresman

Holds Training Certification For Asbestos Management Planner Refresher Course

Expiration: 7/27/2024

Training Date 7/27/2023

Certificate No.

AMPR0727230007N35357 Train

Michael W. Horner
Training Director

LEAD-BASED PAINT INSPECTION REPORT

Juvenile Hall-Building 8-Classrooms 10-14 331 The City Drive, S Orange, California 92868

Prepared for:

Vanir Construction 4540 Duckhorn Drive, Suite 300 Sacramento, California 95834

Prepared by:

MIG

MTGL, Inc. 7742 Arjons Drive San Diego, California 92126 858-537-3999

Project Number:

SDPE-24-061.1CT

Michelle Ehresman, CAC, LIA/LPM, ICRA Certification Number: CDPH# 0458/0459

Report Issuance Date: April 18, 2024

TABLE OF CONTENTS

SECTION

INTRODUCTION	1
General Information Authorization	
Performance	
WARRANTY	2
METHODOLOGY	3
General References Lead Sampling Procedures Performance Characteristic Sheets	
SUMMARY of FINDINGS	4
Lead-Based Paint Summary	
HAZARD CONTROL AND ABATEMENT OPTIONS &LEAD SAFE WORK PRACTICES	5
LEAD BASED PAINT DISCLOSURE	6
APPENDICES	7
Appendix 1 –XRF Data Report and Performance Characteristic Sheet	
Appendix 2 – Site Drawing	
Appendix 3 – Glossary	
Appendix 4 – Inspector Certification	
Appendix 5 – CDPH 8552 Form	
Appendix 6 – Renovate Right	

GENERAL INFORMATION

MTGL was retained by Vanir Construction to conduct a lead-based paint inspection at the subject property located at 331 The City Drive in Orange, California 92868. All inspections were in accordance with the guidelines set forth in the U.S. Department of Housing and Urban Development. This document is prepared for the sole use of Vanir Construction and/or any Regulatory or Governmental agencies that may directly become involved with this project.

MTGL's scope of work was limited to the following Client specified locations at the property:

Building 8 (Single story, wood frame with concrete block and stucco on a concrete slab.)
 Classrooms 10, 11, 12, 13, 14

PURPOSE

The purpose of this inspection is to identify and assess painted components at the subject location above specified regulatory action levels within the Client specified scope of work.

AUTHORIZATION

Authorization to perform the survey was given by Mr. Scott Battles with a notice to proceed via proposal SDPE-24-061.1CT.

PERFORMANCE

All visual inspections and component testing was performed in accordance with Federal, State and local requirements. The inspection was performed by Michelle Ehresman, a California Certified Lead Inspector/Assessor on April 1, 2024.

LEAD-BASED PAINT SURVEY

MTGL, Inc. warrants that the findings contained herein have been prepared with the level of care and skill exercised by experienced and knowledgeable environmental consultants who are appropriately licensed or otherwise trained to perform lead-based paint assessments pursuant to the scope of work required on this project.

MTGL, Inc. warrants that the findings contained herein have been prepared in general accordance with accepted professional practices as applied by similar professionals in the community at the time of its preparation. Changes in the state of the art or in applicable regulations cannot be anticipated and have not been addressed in this report.

The survey included the inspection of accessible materials only. MTGL did not inspect or sample inaccessible areas such as behind walls or within ductwork and did not dismantle any part of the structure to survey inaccessible areas. For the purpose of this warranty, inaccessible is defined as areas of the building that could not be tested (sampled) without destruction of the structure or a portion of the structure. Inaccessible materials that are visible to MTGL inspectors shall be assumed to be lead-based paint coated.

It is the owner's legal obligation to disclose the inspection results to tenants and/or purchasers before obligation under 24 CFR part 35 and 40 CFR part 745 (published in the Federal Register, Volume 61, Number 45, March 6, 1996, starting on P. 9064; copies of the regulations and related materials can be obtained from the National Lead Information Center Clearinghouse, (1-800-424-LEAD)

GENERAL REFERENCES

LEAD-BASED PAINT

Lead-based paint testing was conducted in accordance with the Title 17, California Code of Regulations, Division 1, Chapter 8, Accreditation, Certification and Work Practices in Lead-Related Construction, Section 36000 and the United States Department of Housing and Urban Developments *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, Chapter 7 Lead-Based Paint Inspections*, as published in June 1995 and revised in 1997.

The State of California, HUD and the EPA currently define lead-based paint as paints or other surface coatings, which contain lead equal to or greater than 1.0 milligrams of lead per square centimeter of surface area (mg/cm²), or equal to or greater than 0.5% by weight.

Lead-based paint testing was conducted using portable x-ray fluorescence (XRF) spectrum analyzer, Model Niton XLP 300, Manufactured by Niton, Inc. The Niton XLP 300 is calibrated to measure the K-shell x-ray emissions of lead. The K-shell is normally used for paint analysis because it measures lead in all layers of paint films, including the lower layers where higher concentrations of lead are usually found. An initial calibration and ending calibration is validated each day with a laminated Lead Paint Standards testing card which is provided by the manufacturer. The card is a direct comparison to the paint standard to NIST kit SRM2579a with a spectrum analyzer. If an instrument does not maintain consistent calibrations after following the manufacturer's recommendation, the unit is removed from the site and sent back to the manufacturer for service.

In the instance where paint chip samples are collected, sample collections are conducted by the requirements of the American Society of Testing and Materials standard E 1729, Standard Practice for Field Collection of Dried Paint Samples for Lead Determination by Atomic Spectrometry Techniques and HUD Guidelines.

Performance Characteristic Sheet (PCS)

Performance Characteristic Sheets for most XRF models can be found on the U.S. Department of Housing and Urban Developments Office of Healthy Homes and Lead Hazard Control website, specifically HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.(http://www.hud.gov/offices/lead/lbp/hudguidelines/index.cfm).Operating specification and procedures for the XRF used for this survey can be downloaded at the website above. PCS's can also be obtained by calling toll free to the National Lead Information Clearinghouse, at 800-424-LEAD. Persons with hearing or speech impediments may access the above number via TTY by calling the Federal Information Relay Service at 800-887-8339, toll free.

GENERAL SUMMARY

Lead-Based Paint Inspection Results

The purpose of the lead-based paint survey was to evaluate the referenced facility's painted components that may contain lead-based paint. Suspect components identified during the survey included but not limited to the following:

- Interior: Door and Window Components, Wall, Floor and Ceilings
- Exterior: Wall, Windows and Doors

The following is a summary of lead based painted components identified that contain lead greater than 1.0 mg/cm² or greater * (Please see attachment I for a detail report of findings.)

No lead-based paint was identified in the components tested.

*MTGL, Inc. is not responsible for actual quantity of the material(s). MTGL recommends bidding contractors to calculate quantities for estimated abatement costs. When evaluating this report, it is assumed that according to Chapter 7 HUD guidelines, that if one testing combination (i.e. window, door) is positive for lead in an interior or exterior room equivalent, that all other similar testing combinations in those areas are assumed to be positive.

When evaluating this report, it is assumed that according to Chapter 7 HUD guidelines, that if one testing combination (i.e. window, door) is positive for lead in an interior or exterior room equivalent, that all other similar testing combinations in those areas are assumed to be positive.

Current EPA and Cal/EPA regulations do not require lead-based paint to be removed prior to demolition, unless found to be loose and peeling. Provided that paints are securely adhered to the substrates, deposal of the debris can be handled in California as non-hazardous and non-RCRA waste, pending characterization of the waste.

Loose and peeling paints or other wastes exceeding the Total Threshold Level Concentration (TTLC) of 1,000 ppm ($\mu g/g$) would be required to be disposed of as non-RCRA hazardous waste. However, if the leachable lead contents of the wasted exceed the Soluble Threshold Level Concentrations (STLC) of 5 mg/liter, the wastes must be disposed of as RCRA waste.

Several government agencies have definitions for what amount of lead constitutes paint to be considered "lead-based". The Department of Housing and Urban Development (HUD) has designated the amount to be 1.0 mg/cm², 0.5% by weight or 5000 ppm (parts per million). The HUD regulations are related to potential hazards in the home environment and not to construction activities. The amount designated for high contact play areas is 400 ppm.

Lead Safe Work Practice Requirements for Maintenance, Renovation or Remodeling

EPA's RRP Rule requires anyone (remodeling, renovation and painting contractors and most other trades) who works in pre-1978 housing for compensation and who might disturb painted surfaces to become an EPA Certified Renovator by taking an 8-hour RRP "Lead Safe Work Practices" class from an EPA accredited training provider. The initial certification is good for five (5) years. To "renew" contractors must take a 4-hour RRP Refresher class before their initial certification expires. The RRP rule applies to anyone who works for compensation in pre-1978 housing and/or child-occupied facilities who might disturb painted surfaces, including:

- General contractors
- Demolition workers
- Remodeling contractors
- Maintenance workers in multi-family housing
- Painters, plumbers and most specialty trades.

The RRP rule covers a lot of jobs: renovation, remodeling, painting, window replacement, plumbing, electrical work, heating & air-conditioning, demolition, plus work performed by trades like carpenters, electricians and handymen. The rule also applies to persons working for rental property owners, schools, and day care providers. And, it applies to non-profits and governmental agencies. The RRP Rule requires that "Lead Safe Work Practices" be used when disturbing more than 6 square feet per room or 20 square feet outside.

It shall be noted that California's lead-based paint regulations cover ALL pre-78 structures that have not been tested - not just Target Housing and Child-Occupied Facilities. (Title 17, CCR, Div 1, Ch 8). Since 2003, California law (Title 17) has required that "Lead Safe Work Practices" be used in ALL pre-1978 structures when disturbing any amount of known or "presumed" lead-based paint. Contractors may have taken additional training to meet State of California requirements for Lead-Related Construction and obtain the required California Department of Public Health-Lead Related Construction Certifications for permanent abatement. This certification supplements but does not replace the EPA RRP certification. CDPH State Certified Lead Abatement Supervisors and Workers must also become RRP certified, and abatement firms must also be RRP Certified if they do non-abatement jobs.

Contractors and renovators who work or compensation in pre-1978 housing and/or a child-occupied facility that will disturb painted surfaces greater than 6 square feet per room or 20 square feet outside must give Clients a pamphlet called "Renovate Right" and get a signed receipt before beginning a job. Contractors can call (800) 424-5323 and ask for free copies of "Renovate Right" and the "Small Entity Compliance Guide to Renovate Right" or both can be downloaded as PDF files from the EPA website.

The Consumer Product Safety Commission (CPSC) has defined lead-based paint as surface coatings containing lead concentrations greater than 90 ppm. All children's products, and some furniture, for adult and children, must not contain a concentration of lead greater than 0.009 percent (90 parts per million) in paint or any similar surface coatings. Household paint must also meet this

requirement. In 1978, the CPSC banned the sale of lead-based paint to consumers and the use of lead-based paint in residences and public buildings.

Please note that the detection of any amount of lead in a component will trigger numerous requirements from the California Occupations Safety and Health Administration (Cal-OSHA) lead in construction standard (e.g., Title 8, CCR Section 1532.1), even with common tasks such as drywall demolition, manual paint scraping, and manual paint sanding. The employer is required to conduct air sampling to determine the exposure to lead during these tasks and during other tasks that could result in lead exposure. Until actual exposures are determined, workers are required to wear respirators that are appropriate to the task. Detailed requirements are published in the Cal-OSHA standard for lead in construction.

All workers who may be exposed to lead must be trained in the hazards of lead. The results of air sampling are used to determine if workers are exposed to lead above the action level (AL) of 30 micrograms per cubic meter of air or above the permissible exposure limit (PEL) of 50 micrograms of lead per cubic meter of air, averaged over an 8-hour shift. Exposures above the AL or PEL will trigger additional requirements including engineering controls, proper housekeeping, washing facilities for hand and face washing, additional worker training, respiratory protection, medical monitoring, and additional air sampling. The employer must have a written compliance plan.

Lead Paint

<u>Interim controls which are temporary measures may include the following:</u>

- Paint Film Stabilization: "scrape off the loose and flakey paint and reapply with regular house paint".
- Friction (places that rub) and Impact (places that are bumped or banged) Surface Treatments (Doors, windows, cabinets, floors, etc): treated by covering the surfaces with an abrasion-resistant material, or by repairing to an intact working condition in order to minimize dust.
- Special Cleaning: reduction of lead hazard by cleaning up visible dust by HEPA vacuuming, washing and HEPA vacuuming again.

Interim controls typically last less than 20 years and will require the reevaluation of components on a periodic basis.

As of April 22, 2010, the EPA passed the Renovator, Repair and Paint Rule (RRP) (40 CFR Part 745.90) which states all renovation and painting contractors and other trades who work in pre-1978 housing and who might disturb painted surfaces must become Lead Certified Renovators by taking a one-day course about using "Lead Safe Work Practices" on the job.

Abatement methods which eliminate or put a barrier in front of lead hazards may include the following:

- Encapsulation: covering lead paint with a special liquid or thick coating (not regular paint). Works well on surfaces that are in good condition and should not be used on friction or impact surfaces.
- Enclosure: covering lead paint with a solid, dust-tight barrier that is usually mechanically attached (sheetrock, paneling, drywall).
- Replacement: removal of lead covered components (doors, windows, molding) and replacing with lead free components.
- Removal: recommended when other options may not be feasible; removal of lead paint by means of heat guns, scraping and sanding, power tools, chemical stripping and/or use of abrasives and hydro blasting.

Abatement controls typically last more than 20 years. Abatement methods that will result in the smallest amount of dust generated are preferred. Workers who partake in the above abatement methods should be California State Certified Lead Supervisors and Workers. Clearance sampling after abatement must be conducted by a certified lead-based paint inspector

Lead Safe Work Practice Requirements for Maintenance, Renovation or Remodeling

Lead-based paint, deteriorated paint or lead-based hazards require lead safe work practices. These practices are necessary for regular lead based paint hazard controls, repair, remodeling, renovation or other work activities that may disturb lead based paint above HUD's de minimis levels. HUD describes de minimus levels as follows:

- 20 square feet on exterior surfaces
- 2 square feet in any one interior room or space
- 10% of a type of building component with a small surface area (such as painted windowsills) on interior or exterior surfaces

Workers who may disturb lead-based paint above the de minimis level during repair, renovation or maintenance activities or any other work efforts that disturbs a known or assumed lead-based paint above HUD's de minimis shall be trained in lead safe work practices.

Firms providing abatement services must be certified as an abatement firm by the EPA or the State. Workers conducting abatement must be trained and certified as abatement workers by a training provider accredited by the EPA or State.

SECTION 6 DISCLOSURE

A copy of this summary must be provided to new lessees (tenants) and purchasers of this property under Federal Law (24 CFR part 35 and 40 CFR part 745) before they become obligated under a lease or sales contract. The complete report must also be provided to new purchasers and it must be made available to new tenants. Landlords (lessors) and sellers are also required to distribute an educational pamphlet and include standard warning language in their leases or sales contracts to ensure that parents have the information they need to protect their children from lead-based paint hazards.

It is the owner's legal obligation to disclose the inspection results to tenants and/or purchasers before obligation under 24 CFR part 35 and 40 CFR part 745 (published in the Federal Register, Volume 61, Number 45, March 6, 1996, starting on P. 9064; copies of the regulations and related materials can be obtained from the National Lead Information Center Clearinghouse, (1-800-424-LEAD).

SECTION 7 Appendices

Appendix 1

XRF Data Sheet

and

Performance Characteristic Sheet (PCS)

Project: Vanir- Juvenile Hall-Building 8, 331 The City Drive, Orange, CA 92868

Inspection Date: April 1, 2024

(EPA Regulated Lead-Based Paint= 1.0 mg/cm²)

(<LOD= Below Limit of Detection)

					Comp	onent					
Sample #	Unit	Side	Location	Test Location	Structure	Member	Paint Condition	Substrate	Color	XRF Reading (mg/cm2)	Classification (pos, neg, inc.)
1	B-8		Calibration						Red NIST	1.0	
2	B-8		Calibration						Red NIST	1.0	
3	B-8		Calibration						Red NIST	1.0	
4	B-8	A	Room 10	Door	Door		Intact	Metal	Green	<lod< td=""><td>Negative</td></lod<>	Negative
5	B-8	A	Room 10	Door	Frame		Intact	Metal	Green	<lod< td=""><td>Negative</td></lod<>	Negative
6	B-8	A	Room 10	Wall			Intact	Concrete	White	<lod< td=""><td>Negative</td></lod<>	Negative
7	B-8	В	Room 10	Wall			Intact	Concrete	White	<lod< td=""><td>Negative</td></lod<>	Negative
8	B-8	С	Room 10	Wall			Intact	Concrete	White	<lod< td=""><td>Negative</td></lod<>	Negative
9	B-8	D	Room 10	Wall			Intact	Concrete	White	<lod< td=""><td>Negative</td></lod<>	Negative
10	B-8	В	Room 10	Wall	Base		Intact	Vinyl	Gray	<lod< td=""><td>Negative</td></lod<>	Negative
11	B-8	A	Room 10	Window	Sill		Intact	Metal	Green	<lod< td=""><td>Negative</td></lod<>	Negative
12	B-8	A	Room 10	Window	Frame		Intact	Metal	Green	<lod< td=""><td>Negative</td></lod<>	Negative
13	B-8	A	Room 10	Ceiling	Tile		Intact	Drywall	White	<lod< td=""><td>Negative</td></lod<>	Negative
14	B-8	A	Room 10	Ceiling	Tile		Intact	Metal	White	<lod< td=""><td>Negative</td></lod<>	Negative
15	B-8	D	Room 10	Window	Sill		Intact	Metal	Green	<lod< td=""><td>Negative</td></lod<>	Negative
16	B-8	D	Room 10	Window	Frame		Intact	Metal	Green	<lod< td=""><td>Negative</td></lod<>	Negative
17	B-8	A	Rm. 10 Storage	Door	Door		Intact	Metal	Gray	<lod< td=""><td>Negative</td></lod<>	Negative
18	B-8	A	Rm. 10 Storage	Door	Frame		Intact	Metal	Green	<lod< td=""><td>Negative</td></lod<>	Negative
19	B-8	A	Rm. 10 Storage	Wall			Intact	Drywall	White	<lod< td=""><td>Negative</td></lod<>	Negative
20	B-8	A	Rm. 10 Storage	Door	Door		Intact	Metal	Gray	<lod< td=""><td>Negative</td></lod<>	Negative
21	B-8	A	Rm. 10 Storage	Door	Frame		Intact	Metal	Green	<lod< td=""><td>Negative</td></lod<>	Negative
22	B-8	A	Rm 10 Bath	Wall			Intact	Ceramic	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
23	B-8	A	Rm 10 Bath	Floor			Intact	Ceramic	Tan	<lod< td=""><td>Negative</td></lod<>	Negative

Project: Vanir- Juvenile Hall-Building 8, 331 The City Drive, Orange, CA 92868

Inspection Date: April 1, 2024

(EPA Regulated Lead-Based Paint= 1.0 mg/cm²)

(<LOD= Below Limit of Detection)

					Comp	onent					
Sample #	Unit	Side	Location	Test Location	Structure	Member	Paint Condition	Substrate	Color	XRF Reading (mg/cm2)	Classification (pos, neg, inc.)
24	B-8	D	Room 10	Wall	Cabinet	Door	Intact	Wood	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
25	B-8	D	Room 10	Wall	Cabinet	Casing	Intact	Tan	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
26	B-8	A	Room 12	Door	Door		Intact	Metal	Green	<lod< td=""><td>Negative</td></lod<>	Negative
27	B-8	A	Room 12	Door	Frame		Intact	Metal	Green	<lod< td=""><td>Negative</td></lod<>	Negative
28	B-8	A	Room 12	Wall			Intact	Concrete	White	<lod< td=""><td>Negative</td></lod<>	Negative
29	B-8	В	Room 12	Wall			Intact	Concrete	White	<lod< td=""><td>Negative</td></lod<>	Negative
30	B-8	С	Room 12	Wall			Intact	Concrete	White	<lod< td=""><td>Negative</td></lod<>	Negative
31	B-8	D	Room 12	Wall			Intact	Concrete	White	<lod< td=""><td>Negative</td></lod<>	Negative
32	B-8	A	Room 12	Window	Sill		Intact	Metal	Green	<lod< td=""><td>Negative</td></lod<>	Negative
33	B-8	A	Room 12	Window	Frame		Intact	Metal	Green	<lod< td=""><td>Negative</td></lod<>	Negative
34	B-8	D	Room 12	Wall	Cabinet	Door	Intact	Wood	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
35	B-8	D	Room 12	Wall	Cabinet	Casing	Intact	Wood	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
36	B-8	A	Rm 12 Storage	Door	Door		Intact	Metal	Green	<lod< td=""><td>Negative</td></lod<>	Negative
37	B-8	A	Rm 12 Storage	Door	Frame		Intact	Metal	Green	<lod< td=""><td>Negative</td></lod<>	Negative
38	B-8	D	Rm 12 Storage	Wall			Intact	Drywall	White	<lod< td=""><td>Negative</td></lod<>	Negative
39	B-8	D	Rm 12 Storage	Ceiling			Intact	Drywall	White	<lod< td=""><td>Negative</td></lod<>	Negative
40	B-8	A	Rm 12 bath	Door	Door		Intact	Metal	Green	<lod< td=""><td>Negative</td></lod<>	Negative
41	B-8	A	Rm 12 bath	Door	Frame		Intact	Metal	Green	<lod< td=""><td>Negative</td></lod<>	Negative
42	B-8	A	Rm 12 bath	Wall	Tile		Intact	Ceramic	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
43	B-8	A	Rm 12 bath	Floor	Tile		Intact	Ceramic	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
44	B-8	A	Rm 12 bath	Ceiling			Intact	Drywall	White	<lod< td=""><td>Negative</td></lod<>	Negative
45	B-8	A	Room 14	Door	Door		Intact	Metal	Green	<lod< td=""><td>Negative</td></lod<>	Negative
46	B-8	A	Room 14	Door	Frame		Intact	Metal	Green	<lod< td=""><td>Negative</td></lod<>	Negative

Project: Vanir- Juvenile Hall-Building 8, 331 The City Drive, Orange, CA 92868

Inspection Date: April 1, 2024

(EPA Regulated Lead-Based Paint= 1.0 mg/cm²) (<LOD= Below Limit of Detection)

					Comp	onent					
Sample #	Unit	Side	Location	Test Location	Structure	Member	Paint Condition	Substrate	Color	XRF Reading (mg/cm2)	Classification (pos, neg, inc.)
47	B-8	A	Room 14	Window	Sill		Intact	Metal	Green	<lod< td=""><td>Negative</td></lod<>	Negative
48	B-8		Room 14	Window	Frame		Intact	Metal	Green	<lod< td=""><td>Negative</td></lod<>	Negative
49	B-8	В	Room 14	Wall			Intact	Concrete	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
50	B-8	С	Room 14	Wall			Intact	Concrete	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
51	B-8	A	Rm 14 bath	Door	Door		Intact	Metal	Green	<lod< td=""><td>Negative</td></lod<>	Negative
52	B-8	A	Rm 14 bath	Door	Frame		Intact	Metal	Green	<lod< td=""><td>Negative</td></lod<>	Negative
53	B-8	A	Rm 14 bath	Wall	Tile		Intact	Ceramic	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
54	B-8	A	Rm 14 bath	Wall	Tile		Intact	Ceramic	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
55	B-8	A	Rm 14 bath	Ceiling			Intact	Drywall	White	<lod< td=""><td>Negative</td></lod<>	Negative
56	B-8	A	Rm 14 storage	Door	Door		Intact	Metal	Green	<lod< td=""><td>Negative</td></lod<>	Negative
57	B-8	A	Rm 14 storage	Door	Frame		Intact	Metal	Green	<lod< td=""><td>Negative</td></lod<>	Negative
58	B-8	A	Rm 14 storage	Wall			Intact	Drywall	White	<lod< td=""><td>Negative</td></lod<>	Negative
59	B-8	A	Rm 14 storage	Ceiling			Intact	Drywall	White	<lod< td=""><td>Negative</td></lod<>	Negative
60	B-8	A	Rm 14 storage	Floor			Intact	Concrete	Gray	<lod< td=""><td>Negative</td></lod<>	Negative
61	B-8	D	Room 14	Wall	Cabinet		Intact	Wood	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
62	B-8	D	Room 14	Wall	Cabinet		Intact	Wood	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
63	B-8	A	Exterior	Wall			Intact	Stucco	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
64	B-8	A	Exterior	Wall	Flashing		Fair	Metal	Green	<lod< td=""><td>Negative</td></lod<>	Negative
65	B-8	A	Exterior	Door 1	Door		Intact	Metal	Green	<lod< td=""><td>Negative</td></lod<>	Negative
66	B-8	A	Exterior	Door 1	Frame		Intact	Metal	Green	<lod< td=""><td>Negative</td></lod<>	Negative
67	B-8	A	Exterior	Wall	Overhang		Intact	Stucco	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
68	B-8	A	Exterior	Window	Sill		Intact	Metal	Green	<lod< td=""><td>Negative</td></lod<>	Negative
69	B-8	A	Exterior	Window	Frame		Intact	Metal	Green	<lod< td=""><td>Negative</td></lod<>	Negative

Project: Vanir- Juvenile Hall-Building 8, 331 The City Drive, Orange, CA 92868

Inspection Date: April 1, 2024

(EPA Regulated Lead-Based Paint= 1.0 mg/cm²)

(<LOD= Below Limit of Detection)

					Comp	onent					
Sample #	Unit	Side	Location	Test Location	Structure	Member	Paint Condition	Substrate	Color	XRF Reading (mg/cm2)	Classification (pos, neg, inc.)
70	B-8	В	Exterior	Wall			Intact	Stucco	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
71	B-8	С	Exterior	Wall			Intact	Stucco	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
72	B-8	D	Exterior	Wall			Intact	Stucco	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
73			Calibration						Red NIST	0.9	Calibration

Performance Characteristic Sheet

EFFECTIVE DATE: September 24, 2004 EDITION NO.: 1

MANUFACTURER AND MODEL:

Make: Niton LLC
Tested Model: XLp 300
Source: 109Cd

Note: This PCS is also applicable to the equivalent model variations indicated

below, for the Lead-in-Paint K+L variable reading time mode, in the XLi and

XLp series:

XLi 300A, XLi 301A, XLi 302A and XLi 303A. XLp 300A, XLp 301A, XLp 302A and XLp 303A. XLi 700A, XLi 701A, XLi 702A and XLi 703A. XLp 700A, XLp 701A, XLp 702A, and XLp 703A.

Note: The XLi and XLp versions refer to the shape of the handle part of the instrument. The differences in the model numbers reflect other modes available, in addition to Lead-in-Paint modes. The manufacturer states that specifications for these instruments are identical for the source, detector, and detector electronics relative to the Lead-in-Paint mode.

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

Lead-in-Paint K+L variable reading time mode.

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm² (inclusive)

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm² in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm² film).

If readings are outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instruments into control before XRF testing proceeds.

SUBSTRATE CORRECTION:

For XRF results using Lead-in-Paint K+L variable reading time mode, substrate correction is <u>not</u> needed for: Brick, Concrete, Drywall, Metal, Plaster, and Wood

INCONCLUSIVE RANGE OR THRESHOLD:

K+L MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm²)
Results not corrected for substrate bias on any	Brick	1.0
substrate	Concrete	1.0
	Drywall	1.0
	Metal	1.0
	Plaster	1.0
	Wood	1.0

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* ("HUD Guidelines"). Performance parameters shown on this sheet are calculated from the EPA/HUD evaluation using archived building components. Testing was conducted in August 2004 on 133 testing combinations. The instruments that were used to perform the testing had new sources; one instrument's was installed in November 2003 with 40 mCi initial strength, and the other's was installed June 2004 with 40 mCi initial strength.

OPERATING PARAMETERS:

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

SUBSTRATE CORRECTION VALUE COMPUTATION:

Substrate correction is not needed for brick, concrete, drywall, metal, plaster or wood when using Lead-in-Paint K+L variable reading time mode, the normal operating mode for these instruments. If substrate correction is desired, refer to Chapter 7 of the HUD Guidelines for guidance on correcting XRF results for substrate bias.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing. Use the K+L variable time mode readings.

Conduct XRF retesting at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below.

Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family housing a result is defined as the average of three readings. In multifamily housing, a result is a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF results.

Compute the average of all ten re-test XRF results.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

TESTING TIMES:

For the Lead-in-Paint K+L variable reading time mode, the instrument continues to read until it is moved away from the testing surface, terminated by the user, or the instrument software indicates the reading is complete. The following table provides testing time information for this testing mode. The times have been adjusted for source decay, normalized to the initial source strengths as noted above. Source strength and type of substrate will affect actual testing times. At the time of testing, the instruments had source strengths of 26.6 and 36.6 mCi.

Testing Times Using K+L Reading Mode (Seconds)						
	All Data			Median for laboratory-measured lead levels (mg/cm²)		
Substrate	25 th Percentile	Median	75 th Percentile	Pb < 0.25	0.25 <u><</u> Pb<1.0	1.0 <u><</u> Pb
Wood Drywall	4	11	19	11	15	11
Metal	4	12	18	9	12	14
Brick Concrete Plaster	8	16	22	15	18	16

CLASSIFICATION RESULTS:

XRF results are classified as positive if they are greater than or equal to the threshold, and negative if they are less than the threshold.

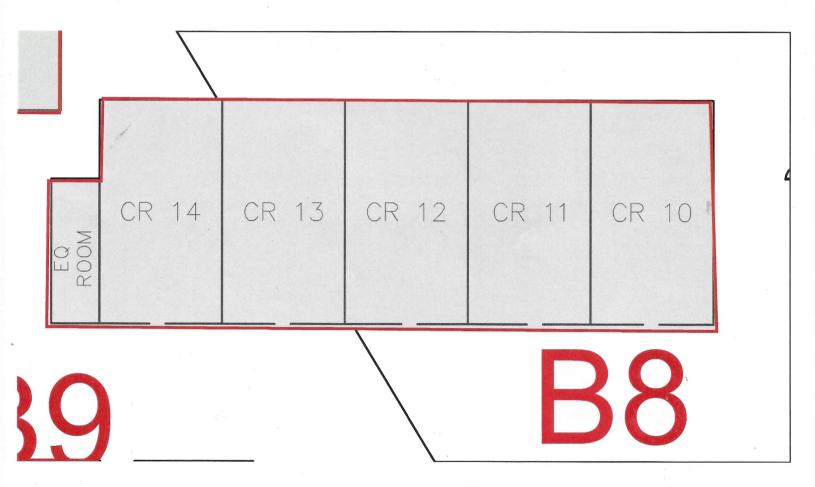
DOCUMENTATION:

A document titled *Methodology for XRF Performance Characteristic Sheets* provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. For a copy of this document call the National Lead Information Center Clearinghouse at 1-800-424-LEAD.

This XRF Performance Characteristic Sheet was developed by the Midwest Research Institute (MRI) and QuanTech, Inc., under a contract between MRI and the XRF manufacturer. HUD has determined that the information provided here is acceptable when used as guidance in conjunction with Chapter 7, Lead-Based Paint Inspection, of HUD's *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*.

APPENDIX 2 SITE DRAWING

No lead based paint reported.



Appendix 3

Glossary





Glossary

AALA: American Association for Laboratory Accreditation. Also known as A2LA.

Abatement: A measure or set of measures designed to permanently eliminate lead-based paint hazards or lead-based paint. Abatement strategies include the removal of lead-based paint, enclosure, encapsulation, replacement of building components coated with lead-based paint, removal of lead-contaminated dust, and removal of lead-contaminated soil or overlaying of soil with a durable covering such as asphalt (grass and sod are considered interim control measures). All of these strategies require preparation; cleanup; waste disposal; postabatement clearance testing; recordkeeping; and, if applicable, monitoring. See also Complete abatement and Interim controls.

Abrasion resistance: Resistance of the paint to wear by rubbing or friction; related to both toughness and gloss.

Accessible surface: Any protruding interior or exterior surface, such as an interior window sill, that a young child can mouth or chew.

Accreditation: A formal recognition that an organization, such as a laboratory, is competent to carry out specific tasks or types of tests.

Accredited laboratory: A laboratory that has been evaluated and approved by the National Lead Laboratory Accreditation Program (NLLAP), to perform lead measurement or analysis, usually over a specified period of time.

Accredited training provider: A training provider who meets the standards established by EPA for the training of risk assessors, inspectors, lead-based paint hazard control contractors, and workers.

Accuracy: The degree of agreement between an observed value and an accepted reference value (a "true" value); a data quality indicator. Accuracy includes a combination of random errors (precision) and systematic errors (bias) due to sampling and analysis.

Acrylic: A synthetic resin used in highperformance waterborne coatings; a coating whose binder contains acrylic resins.

Adhesion: The ability of dry paint or other coating to attach to a surface and remain fixed on it without blistering, flaking, cracking, or being susceptible to removal by tape.

Administrative removal: The temporary removal of workers from the job to prevent the concentration of lead in their blood from reaching levels requiring medical removal.

AIHA: American Industrial Hygiene Association.

ALC: See Apparent Lead Concentration.

Aliquot: See Subsample.

Alkali: A chemical, such as Iye, soda, lime, etc., that will neutralize an acid. Oil paint films can be destroyed by alkalies. Some paint removal products contain alkaline substances.

Alkyd: Synthetic resin modified with oil; coating that contains alkyd resins in the binder.

Apparent Lead Concentration (ALC): The x-ray fluorescence (XRF) reading or average of more than one reading on a painted surface. See also XRF analyzer, Substrate Equivalent Lead (SEL), and Corrected Lead Concentration (CLC).

Bare soil: Soil not covered with grass, sod, some other similar vegetation, or paving, including the sand in sandboxes.





Bias: A systematic error in the measurement process. For XRF readings, one source of bias is the substrate effect. See also Substrate effect and XRF analyzer.

Biennial report (for hazardous waste): A report (EPA Form 8700–13A) submitted by generators of hazardous waste to the EPA Regional Administrator. The report is due on March 1 of even-numbered years. The report includes information on the generator's activities during the previous calendar year. The owners and operators of treatment, storage, and disposal facilities must also prepare and submit biennial reports using EPA Form 8700–1313.

Binder: Solid ingredients in a coating that hold the pigment particles in suspension and bind them to the substrate. Binders used in paints and coatings include oil, alkyd, acrylic, latex, and epoxy. The nature and amount of binder determines many of the coating's performance properties—washability, toughness, adhesion, gloss, etc. See also Pigment.

Biological monitoring: The analysis of blood, urine, or both to determine the level of lead contamination in the body. Blood lead levels are expressed in micrograms of lead per deciliter (one-tenth of a liter) of blood, or $\mu g/dL$. They are also expressed in micromoles per liter ($\mu mol/L$).

Blank: A nonexposed sample of the medium being used for testing (i.e., wipe or filter) that is analyzed to determine if the medium has been contaminated with lead (e.g., at the factory or during transport).

Blind sample: A subsample submitted for analysis with a composition and identity known to the submitter but not to the analyst; used to test the analyst's or laboratory's proficiency in conducting measurements. See also Spiked sample.

Blood lead threshold: Any blood lead level greater than or equal to 10 $\mu g/dL$ as defined by the Centers for Disease Control and Prevention. See also Elevated Blood Lead level (EBL) child.

Building component: Any element of a building that may be painted or have dust on its surface, e.g. walls, stair treads, floors, railings, doors, window sills, etc.

Building component replacement: See Replacement.

Cementitious material: A material that is mixed with water, either with or without aggregate, to provide the plasticity, cohesion, and adhesion necessary for the placement and formation of a rigid mass (ASTM Standard C 11).

Centimeter: See cm.

Certification: The process of testing and evaluating against certain specifications the competence of a person, organization, or other entity in performing a function or service, usually for a specified period of time.

Certified: The designation for contractors who have completed training and other requirements to allow them to safely undertake risk assessments, inspections, or abatement work. Risk assessors, inspectors, and abatement contractors should be certified by the appropriate local, State or Federal agency.

Certified Industrial Hygienist (CIH): A person who has passed the 2-day certification exam of the American Board of Industrial Hygiene, and who has at least 4 years of experience in industrial hygiene and a graduate degree or a total of 5 years of experience. See also Industrial hygienist.

Certified reference material (CRM): Reference material that has at least one of its property values established by a technically valid procedure and is accompanied by or traceable to a certificate or other documentation issued by a certifying body. See also Standard reference material.

CFR: See Code of Federal Regulations.

Chalking: The photo-oxidation of paint binders—usually due to weathering—that causes a powder to form on the film surface.





Characteristics (of hazardous waste): EPA has identified four characteristics of hazardous waste: ignitability, corrosivity, reactivity, and toxicity (as determined by the TCLP test). Any solid waste that exhibits at least one of these characteristics may be classified as hazardous under the Resource Conservation and Recovery Act (RCRA), depending on how the waste is produced and what quantities are generated. See also Toxicity Characteristic Leaching Procedure (TCLP).

Chewable surface: See Chewed surface and Accessible surface.

Chewed surface: Any painted surface that shows evidence of having been chewed or mouthed by a young child. A chewed surface is usually a protruding, horizontal part of a building, such as an interior window sill. See also Accessible surface.

CLC: See Corrected Lead Concentration (CLC).

Cleaning: The process of using a HEPA vacuum and wet cleaning agents to remove leaded dust; the process includes the removal of bulk debris from the work area. OSHA prohibits the use of compressed air to clean lead-contaminated dust from a surface.

Clearance examination: Visual examination and collection of environmental samples by an inspector or risk assessor and analysis by an accredited laboratory upon completion of an abatement project, interim control intervention, or maintenance job that disturbs lead-based paint (or paint suspected of being lead-based). The clearance examination is performed to ensure that lead exposure levels do not exceed standards established by the EPA Administrator pursuant to Title IV of the Toxic Substances Control Act, and that any cleaning following such work adequately meets those standards.

Clearance examiner: A person who conducts clearance examinations following lead-based paint hazard control and cleanup work, usually a certified risk assessor or a certified inspector.

cm: Centimeter; 1/100 of a meter.

Code of Federal Regulations (CFR): The codification of the regulations of Federal agencies. The regulations are published in the Federal Register. See also Federal Register (FR).

Cohesion: Ability of a substance to adhere to itself; internal adhesion; the force holding a substance together.

Common area: A room or area that is accessible to all residents in a community (e.g., hallways or lobbies); in general, any area not kept locked.

Competent person: As defined in the OSHA Lead Construction Standard (29 CFR 1926.62), a person who is capable of identifying or predicting hazardous working conditions and work areas, and who has authorization to take prompt, corrective measures to eliminate the hazards. A competent person is not necessarily a risk assessor, inspector, or abatement project supervisor.

Complete abatement: Abatement of all lead-based paint inside and outside a dwelling or building and reduction of any lead-contaminated dust or soil hazards. All of these strategies require preparation; cleanup; waste disposal; postabatement clearance testing; recordkeeping; and, if applicable, reevaluation and on-going monitoring. See also Abatement.

Compliance plan: A document that describes the types of tasks, workers, protective measures, and tools and other materials that may be employed in lead-based paint hazard control to comply with the OSHA Lead Exposure in Construction standard.

Composite sample: A single sample made up of individual subsamples. Analysis of a composite sample produces the arithmetic mean of all subsamples.

Containment: A process to protect workers and the environment by controlling exposures to the lead-contaminated dust and debris created during abatement. See Worksite preparation level.





Contingency plan: A document that describes an organized, planned, and coordinated course of action to be taken during any event that threatens human health or the environment, such as a fire, explosion, or the release of hazardous waste or its constituents from a treatment, storage, or disposal facility.

Corrected Lead Concentration (CLC): The absolute difference between the Apparent Lead Concentration and the Substrate Equivalent Lead. See also Apparent Lead Concentration (ALC) and Substrate Equivalent Lead (SEL).

Detection limit: The minimum amount of a substance that can be reliably measured by a particular method.

Deteriorated lead-based paint: Any lead-based paint coating on a damaged or deteriorated surface or fixture, or any interior or exterior lead-based paint that is peeling, chipping, blistering, flaking, worn, chalking, alligatoring, cracking, or otherwise becoming separated from the substrate.

Digestion blank: A mixture of the reagents used for digesting of paint, soil, or dust matrixes but without the matrix. The blank undergoes all the steps of the analysis, starting with digestion. The blank is used to evaluate the contamination process from a laboratory.

Direct-reading XRF: An analyzer that provides the operator with a display of lead concentrations calculated from the lead K x ray intensity without a graphic of the spectrum usually in mg/cm² (milligrams of lead per square centimeter of painted surface area). See also XRF analyzer.

Disposal (of hazardous waste): The discharge, deposit, injection, dumping, spilling, leaking, or placement of solid or hazardous waste on land or in water so that none of its constituents can pollute the environment by being emitted into the air or discharged into a body of water, including groundwater.

Disposal facility: A facility or part of one in which hazardous waste is placed on land or in water to remain there after the facility closes.

Door mat: See Walk-off mat.

Dust removal: A form of interim control that involves initial cleaning followed by periodic monitoring and recleaning, as needed. Depending on the severity of lead-based paint hazards, dust removal may be the primary activity or just one element of a broader control effort.

Dust trap: A surface, component, or furnishing that serves as a reservoir where dust can accumulate.

EBL child: See Elevated Blood Lead level (EBL) child.

Efflorescence: The salt rising to the surface of a material, such as masonry, plaster, or cement, caused by the movement of water through the material. Paint or encapsulants may not adhere to a surface contaminated with efflorescence.

Elastomeric: A group of pliable, elastic liquid encapsulant coatings. An elastomer is a macromolecular material which, at room temperature, is capable of substantially recovering its size and shape after the force causing its deformation is removed (see ASTM D 907, D-14).

Elevated Blood Lead level (EBL) child: A child who has a blood lead level greater than or equal to 20 μg/dL or a persistent 15 μg/dL. See also Blood lead threshold.

Encapsulation: Any covering or coating that acts as a barrier between lead-based paint and the environment, the durability of which relies on adhesion and the integrity of the existing bonds between multiple layers of paint and between the paint and the substrate. See also Enclosure.

Enclosure: The use of rigid, durable construction materials that are mechanically fastened to the substrate to act as a barrier between the lead-based paint and the environment.





Engineering controls: Measures other than respiratory protection or administrative controls that are implemented at the work site to contain, control, and/or otherwise reduce exposure to lead-contaminated dust and debris usually in the occupational health setting. The measures include process and product substitution, isolation, and ventilation.

Epoxy paint: Paint based on an epoxy resin. An epoxy resin is a cross-linking resin the reactivity of which depends on the epoxide group.

Evaluation: Risk assessment, paint inspection, reevaluation, investigation, clearance examination, or risk assessment screen.

Examination: See Clearance examination.

Examiner: A person certified to conduct clearance examinations or reevaluations, usually a certified inspector or certified risk assessor.

Exposure monitoring: The sampling and analysis of air both inside and outside the work area to determine the degree of worker and resident exposure to lead or other airborne contaminants, often involving air sampling inside a worker's breathing zone.

Exterior work area: For lead hazard control work, the exterior work area includes any exterior building components, such as a porch or stairway; the safety perimeter; and access barriers.

Facility (pertaining to hazardous waste): All buildings, contiguous land, structures, and other appurtenances, as well as any improvements, where lead-based paint or hazardous waste is treated, stored, or disposed. A facility may consist of several different treatment, storage, or disposal units, such as landfills and surface impoundments.

Federal Register (FR): A daily Federal publication that contains proposed and final regulations, rules, and notices.

Fibermat: A semirigid woven material attached with a liquid adhesive to a surface or substrate.

Field blank: A clean sample of the matrix (e.g., filter, or wipe) that has been exposed to the sampling conditions; returned to the laboratory; and analyzed as an environmental sample. Clean quartz sand, air sampling filters and cassettes, and clean wipes can be used as field blanks. The field blank, which should be treated just like the sample, indicates possible sources of contamination.

FR: See Federal Register (FR).

Friction surface: Any interior or exterior surface, such as a window or stair tread, subject to abrasion or friction.

Generator: Any person whose act or operation produces hazardous waste identified or listed in 40 CFR Part 261 or whose act causes a hazardous waste to come under regulation (40 CFR 260.10).

Generator identification number: The unique number assigned by EPA to each generator; transporter of hazardous waste; and treatment, storage, or disposal facility.

Hazardous waste: As defined in EPA regulations (40 CFR 261.3), hazardous waste is solid waste or a combination of solid wastes that because of its quantity; concentration; or physical, chemical, or infectious characteristics may cause or significantly contribute to increases in mortality, serious and irreversible or incapacitating but reversible illnesses, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed. As defined in the regulations, solid waste is hazardous if it meets one of four conditions: (1) exhibits a characteristic of hazardous waste (40 CFR Sections 261.20 through 262.24); (2) has been listed as hazardous (40 CFR Section 261.31 through 261.33); (3) is a mixture containing a listed hazardous waste combined with a nonhazardous solid waste, unless the mixture is specifically excluded or no longer exhibits any of the characteristics of hazardous waste; and (4) is not excluded from regulation as hazardous waste. For lead-based paint abatement





waste, hazardous waste is waste that contains more than 5 ppm of leachable lead as determined by the TCLP test, or is waste that is corrosive, ignitable, or reactive and not otherwise excluded.

Hazardous Waste Manifest: See Manifest.

Heat gun: A device capable of heating leadbased paint causing it to separate from the substrate. For lead hazard control work, the heat stream leaving the gun should not exceed 1,100 °F (some authorities may use a different temperature).

HEPA filter: See High-Efficiency Particulate Air (HEPA) filter.

HEPA/wet wash/HEPA cycle: The cleaning cycle that begins with HEPA vacuuming, followed by a wet wash with a lead-specific cleaning agent, such as trisodium phosphate detergent or another liquid cleaning agent, followed by a final pass with a HEPA vacuum over the surface.

High-Efficiency Particulate Air (HEPA) filter: A filter capable of removing particles of 0.3 microns or larger from air at 99.97 percent or greater efficiency.

High phosphate detergent: See Trisodium phosphate (TSP) detergent.

Impact surface: An interior or exterior surface (such as surfaces on doors) subject to damage by repeated impact or contact.

Incinerator: An enclosed device using controlled flame combustion that neither meets the criteria for classification as a boiler nor is listed as an industrial furnace.

Industrial hygienist: A person having a college or university degree in engineering, chemistry, physics, medicine, or a related physical or biological science who, by virtue of special training, is qualified to anticipate, recognize, evaluate, and control environmental and occupational health hazards and the impact of those hazards on the community and workers.

In-place management: See Interim controls.

Inspection (of paint): A surface-by-surface investigation to determine the presence of lead-based paint (in some cases including dust and soil sampling) and a report of the results.

Inspector: An individual who has completed training from an accredited program and been licensed or certified by the appropriate State or local agency to (1) perform inspections to determine and report the presence of lead-based paint on a surface-by-surface basis through onsite testing, (2) report the findings of such an inspection, (3) collect environmental samples for laboratory analysis, (4) perform clearance testing, and (5) document successful compliance with lead-based paint hazard control requirements or standards.

Interim controls: A set of measures designed to temporarily reduce human exposure or possible exposure to lead-based paint hazards. Such measures include specialized cleaning, repairs, maintenance, painting, temporary containment, and management and resident education programs. Monitoring, conducted by owners, and reevaluations, conducted by professionals, are integral elements of interim control. Interim controls include dust removal; paint film stabilization; treatment of friction and impact surfaces; installation of soil coverings, such as grass or sod; and land-use controls. See also Monitoring, Reevaluation, and Abatement.

Interior window sill: The portion of the horizontal window ledge that protrudes into the interior of the room, adjacent to the window sash when the window is closed; often called the window stool.

Investigation (pertaining to EBL case): The process of determining the source of lead exposure for a child or other resident with an elevated blood lead level. Investigation consists of administration of a questionnaire, comprehensive environmental sampling, case management, and other measures.





Investigator: A person who conducts an investigation of a dwelling where a resident has an elevated blood lead level. The investigator must be proficient in interviewing techniques, environmental sampling, and the interpretation of risk assessment and environmental sampling data.

Laboratory analysis: A determination of the lead content by atomic absorption spectroscopy, inductively coupled plasma emission spectroscopy, or laboratory-based K or L x-ray fluorescence, or an equivalent method.

Landfill: A State-licensed or State-permitted disposal facility that meets municipal solid waste standards (see Federal regulations at 40 CFR 258).

Landfill liner: A continuous layer of natural or synthetic materials placed beneath and sometimes around a surface impoundment, landfill, or landfill cell. The layer restricts the downward or lateral escape of hazardous waste, hazardous waste constituents, or leachate (40 CFR Part 258).

Latex: A waterborne emulsion paint made with synthetic binders, such as 100-percent acrylic, vinyl acrylic, terpolymer, or styrene acrylic; a stable emulsion of polymers and pigment in water.

Lead: Lead includes metallic lead and inorganic and organic compounds of lead.

Lead-based paint: Any paint, varnish, shellac, or other coating that contains lead equal to or greater than 1.0 mg/cm² as measured by XRF or laboratory analysis, or 0.5 percent by weight $(5,000~\mu\text{g/g},\,5,000~\text{ppm},\,\text{or}\,5,000~\text{mg/kg})$ as measured by laboratory analysis. (Local definitions may vary.)

Lead-based paint hazard: A condition in which exposure to lead from lead-contaminated dust, lead-contaminated soil, or deteriorated lead-based paint would have an adverse effect on human health (as established by the EPA Administrator under Title IV of the Toxic Substances Control Act). Lead-based paint hazards

include for example, deteriorated lead-based paint, leaded dust levels above applicable standards, and bare leaded soil above applicable standards.

Lead-based paint hazard control: Activities to control and eliminate lead-based paint hazards, including interim controls, abatement, and complete abatement.

Lead-based paint abatement planner/designer: An individual who has completed an accredited training program on planning and designing lead-based paint abatement projects.

Lead-based paint abatement worker: See Worker.

Lead carbonate: A pigment used in some leadbased paints as a hiding agent; also known as white lead.

Lead-contaminated dust: Surface dust in residences that contains an area or mass concentration of lead in excess of the standard established by the EPA Administrator, pursuant to Title IV of the Toxic Substances Control Act. Until the EPA standards are set, the HUD-recommended clearance and risk assessment standards for leaded dust are 100 $\mu g/ft^2$ on floors, 500 $\mu g/ft^2$ on interior window sills, and 800 $\mu g/ft^2$ on window troughs. The recommended standard for lead hazard screens for floors is 50 $\mu g/ft^2$ and for window troughs is 400 $\mu g/ft^2$.

Lead-contaminated soil: Bare soil on residential property that contains lead in excess of the standard established by the EPA Administrator, pursuant to Title IV of the Toxic Substances Control Act. The HUD-recommended standard and interim EPA guidance is 400 $\mu g/g$ for high-contact play areas and 2,000 $\mu g/g$ in other bare areas of the yard. Soil contaminated with lead at levels greater than or equal to 5,000 $\mu g/g$ should be abated by removal or paving.

Lead-free dwelling: A lead-free dwelling contains no lead-based paint and has interior dust and exterior soil lead levels below the applicable HUD and EPA standards.





Lead hazard screen: A means of determining whether residences in good condition should have a full risk assessment. Also called a risk assessment screen.

Lead-poisoned child: A child with a single blood lead level that is greater than or equal to 20 μ g/dL or consecutive blood lead levels greater than or equal to 15 μ g/dL. Local definitions may vary.

Lead-specific detergent: A cleaning agent manufactured specifically for cleaning and removing leaded dust or other lead contamination.

Leaded dust: See Lead-contaminated dust.

Leaded zinc: A paint primer made from zinc oxide and lead sulfates.

Licensed: Holding a valid license or certification issued by EPA or by an EPA-approved State program pursuant to Title IV of the Toxic Substances Control Act. The license is based on certification for lead-based paint hazard control work. See also Certified.

Listed waste: A hazardous waste that has been placed on one of three lists developed by EPA: nonspecific source wastes, specific source wastes, and commercial chemical products. The lists were developed by examining different types of waste and chemical products to determine if they exhibited one of the four characteristics of hazardous waste (toxicity, corrosivity, ignitability, or reactivity), met the statutory definition of hazardous waste, were acutely toxic or acutely hazardous, or were otherwise toxic.

Maintenance: Work intended to maintain adequate living conditions in a dwelling, which has the potential to disturb lead-based paint or paint that is suspected of being lead-based.

Manifest: The shipping document (EPA Form 8700–22 or a comparable form required by the State or locality) used for identifying the quantity, composition, origin, routing, and destination of hazardous waste during its transport

from the point of generation to the point of treatment, storage, or disposal. Also, a shipping document used to keep track of items being transported. All hazardous waste must be accompanied by a manifest. See Hazardous waste.

Mat: See Walk-off mat.

Matrix blank: A sample of the matrix (paint chips, soil, or dust) that does not contain the analyte lead. This sample goes through the complete analysis, including digestion.

MDL: See Method detection limit (MDL).

Mean: The arithmetic average of a series of numerical data values; for example, the algebraic sum of the data values divided by the number of data values.

Medical removal: The temporary removal of workers from the job because of the occurrence of elevated blood lead levels as defined in the OSHA Lead Exposure in Construction standard (29 CFR 1926.62).

Method blank: See Digestion blank.

Method detection limit (MDL): The minimum concentration of an analyte that, for a given matrix and method, has a 99-percent probability of being identified, qualitatively or quantitatively measured, and reported to be greater than zero.

mg: Milligram; 1/1,000 of a gram.

Microgram: See µg.

Mil: 1/1,000 of an inch; used to measure thickness.

Milligram: See mg.

Monitoring: Surveillance to determine (1) that known or suspected lead-based paint is not deteriorating, (2) that lead-based paint hazard controls, such as paint stabilization, enclosure, or encapsulation have not failed, (3) that structural problems do not threaten the integrity of hazard controls or of known or suspected





lead-based paint, and (4) that dust lead levels have not risen above applicable standards. There are two types of monitoring activities; visual surveys by property owners and reevaluations by certified risk assessors. Visual surveys are generally conducted annually for the purpose of making the first three determinations listed above. Reevaluations are conducted in accordance with the Standard Reevaluation Schedule (or more frequently, if needed) for the purpose of making all four determinations. Monitoring is not required in properties known to be free of lead-based paint. See also Reevaluation and Standard reevaluation schedule.

Monofil: A State-approved landfill that accepts only construction debris.

Mouthable surface: See Chewed surface.

Multifamily housing: Housing that contains more than one dwelling unit per location.

NLLAP requirements: Requirements, specified by the EPA National Lead Laboratory Accreditation Program (NLLAP), for accreditation for the lead analysis of paint, soil, and dust matrixes by an EPA-recognized laboratory accreditation organization.

Offsite paint removal: The process of removing a component from a building and stripping the paint from the component at an offsite paint-stripping facility.

Ongoing monitoring: See Monitoring.

Owner: A person, firm, corporation, guardian, conservator, receiver, trustee, executor, government agency or entity, or other judicial officer who, alone or with others, owns, holds, or controls the freehold or leasehold title or part of the title to property, with or without actually possessing it. This definition includes a vendee who possesses the title, but does not include a mortgagee or an owner of a reversionary interest under a ground rent lease.

Oxidation: A chemical reaction that occurs upon exposure to oxygen. Some coatings cure by oxidation; oxygen enters the liquid coating and crosslinks (attaches) the resin molecules. This film-forming method is also called "air cure" or "air dry." Oxidation also causes rust to form on metals and paint to chalk.

Paint film stabilization: The process of wet scraping, priming, and repainting surfaces coated with deteriorated lead-based paint; paint film stabilization includes cleanup and clearance.

Paint removal: An abatement strategy that entails the removal of lead-based paint from surfaces. For lead hazard control work, this can mean using chemicals, heat guns below 1,100 °F, and certain *contained* abrasive methods. Open flame burning, open abrasive blasting, sandblasting, water blasting, and extensive dry scraping are prohibited paint removal methods. (Methylene chloride paint removers and dry scraping are also not recommended.)

Patch test: A test method or procedure to assess the adhesion of an encapsulant coating to a substrate covered with a layer or layers of lead-based paint.

Personal breathing zone samples: Air samples collected from the breathing zone of a worker (within a 1-foot radius of the worker's mouth) but outside the respirator. The samples are collected with a personal sampling pump operating at 2 liters per minute, drawing air through a 37 mm mixed cellulose ester filter housed in a closed-face cassette with a pore size of 0.8 microns. See Exposure monitoring.

Personal Protective Equipment (PPE): Equipment for protecting the eyes, face, head, and/or extremities; includes protective clothing, respiratory devices, and protective shields; used when hazards capable of causing bodily injury or impairment are encountered.





PHA: See Public Housing Agency (PHA).

Pigment: Insoluble, finely ground materials that give paint its properties of color and hide.

Pigment Volume Concentration (PVC): Pigment volume as a percentage of the total non-volatile ingredients.

Pilot project: In multifamily housing, the testing of a lead-based paint hazard control strategy on a limited number of dwellings, usually those that are vacant, to determine the feasibility of carrying out such a strategy in the entire multifamily housing development; usually involves paint testing, air sampling, wipe sampling, worksite preparation, and a variety of lead-based paint hazard control treatments.

Plastic: See Polyethylene plastic.

Polyethylene plastic: All references to polyethylene plastic refer to 6-mil plastic sheeting or polyethylene bags (or doubled bags if using 4-mil polyethylene bags), or any other thick plastic material shown to demonstrate at least equivalent performance. Plastic used to contain waste should be capable of completely containing the waste and, after being properly sealed, should remain leak-tight with no visible signs of discharge during movement or relocation.

Polyurethane: An exceptionally hard and wear-resistant coating created by the reaction of polyols with a multifunctional isocyanate; often used to seal wood floors following lead-based paint hazard control work and cleaning.

Precision: The degree to which a set of observations or measurements of the same property, usually obtained under similar conditions, conform to themselves; a data quality indicator. Precision is usually expressed in either absolute or relative terms as standard deviation, variance, or range. Often known as "reproducibility."

Primary prevention: The process of controlling lead hazards to prevent exposure *before* a child is poisoned. See Secondary prevention and Tertiary prevention.

Primary standard: A substance or device with a property or value that is unquestionably accepted, within specified limits, in establishing the value of the same or related property of another substance or device.

Public Housing Agency (PHA): Any State, county, municipality, or other government entity or public body, or agency or instrumentality thereof, authorized to engage or assist in the development or operation of housing for low-income families.

PVC: See Pigment Volume Concentration (PVC).

Quality Assurance (QA): An integrated system of activities involving planning, quality control, quality assessment, reporting, and quality improvement to ensure that a product or service meets defined standards of quality within a stated level of confidence.

Quality Control (QC): The overall system of technical activities whose purpose is to measure and control the quality of a product or service so that it meets the needs of users. The aim is to provide a level of quality that is satisfactory, adequate, dependable, and economical.

Random sample: A sample drawn from a population in a way that allows each member of the population to have an equal chance of being selected. Random sampling is a process used to identify locations for the lead-based paint inspections in multifamily dwellings. See also Targeted sample and Worst-case sample.

RCRA: See Resource Conservation and Recovery Act (RCRA).

Reevaluation: In lead hazard control work, the combination of a visual assessment and collection of environmental samples performed by a certified risk assessor to determine if a previously implemented lead-based paint hazard control measure is still effective and if the dwelling remains lead-safe.





Reference material: A material or substance that has at least one sufficiently well established property that can be used to calibrate an apparatus, assess a measurement method, or assign values to materials.

Reinspection: See Reevaluation.

Removal: See Paint removal.

Renovation: Work that involves construction and/or home or building improvement measures such as window replacement, weatherization, remodeling, and repainting.

Replacement: A strategy of abatement that entails the removal of building components coated with lead-based paint (such as windows, doors, and trim) and the installation of new components free of lead-based paint.

Representative sample: A sample of a universe or whole (e.g., waste sample pile, lagoon, groundwater, or waste stream) that can be expected to exhibit the average properties of the entire universe or whole.

Resident: A person who lives in a dwelling.

Resource Conservation and Recovery Act (RCRA): The primary Federal statute governing waste management from generation to disposal. RCRA defines the criteria for hazardous and nonhazardous waste.

Risk assessment: An onsite investigation of a residential dwelling to discover any lead-based paint hazards. Risk assessments include an investigation of the age, history, management, and maintenance of the dwelling, and the number of children under age 6 and women of childbearing age who are residents; a visual assessment; limited environmental sampling (i.e., collection of dust wipe samples, soil samples, and deteriorated paint samples); and preparation of a report identifying acceptable abatement and interim control strategies based on specific conditions.

Risk assessment screen: A type of risk assessment performed only in buildings in good condition using fewer samples but more stringent evaluation criteria (standards) to determine lead hazards.

Risk assessor: A certified individual who has completed training with an accredited training program and who has been certified to (1) perform risk assessments, (2) identify acceptable abatement and interim control strategies for reducing identified lead-based paint hazards, (3) perform clearance testing and reevaluations, and (4) document the successful completion of lead-based paint hazard control activities.

Sample site: A specific spot on a surface being tested for lead concentration.

Saponification: The chemical reaction between alkalies and oil that produces a type of soap. Because of saponification, oil and alkyd coatings will not adhere to masonry substrates, galvanized metals, or zinc-rich primers. Also a form of incompatibility between types of coatings.

Screen: See Risk assessment screen or Lead hazard screen.

Screening: The process of testing children to determine if they have elevated blood lead levels.

Secondary prevention: The process of identifying children who have elevated blood lead levels through screening and controlling or eliminating the sources of further exposure. See also Primary prevention and Tertiary prevention.

SEL: See Substrate Equivalent Lead (SEL).

Site: The land or body of water where a facility is located or an activity is conducted. The site includes adjacent land used in connection with the facility or activity.





Small-quantity generator: Owners, contractors (generators), or both who produce less than 100 kg of hazardous waste per month and accumulate less than 100 kg of hazardous waste at any one time, or who produce less than 1 kg of acutely hazardous waste per month and accumulate less than 1 kg of acutely hazardous waste at any one time.

Soil: See Bare soil.

Solid waste: As defined by RCRA, the term solid waste means garbage; refuse; sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility; or other discarded materials, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations or from community activities. The term does not include solid or dissolved material in domestic sewage or solid or dissolved material in irrigation return flows or industrial discharges (which are point sources subject to permits under the Clean Water Act), nor does the term include special nuclear or byproduct material as defined by the Atomic Energy Act of 1954.

Spectrum analyzer: A type of XRF analyzer that provides the operator with a plot of the energy and intensity, or counts of both K and L x-ray spectra, as well as a calculated lead concentration. See also XRF analyzer.

Spiked matrix: See Spiked sample.

Spiked sample: A sample prepared by adding a known mass of the target analyte (e.g., leaded dust) to a specific amount of matrix sample (e.g., one dust wipe) for which an independent estimate of the target analyte concentration is available. Spiked samples are used to determine, for example, the effect of the matrix on a method's recovery efficiency. See also Blind sample.

Spot-prime: To apply a paint primer to localized areas of exposed substrate.

Standard deviation: A measure of the precision of a reading; the spread of the deviation from the mean. The smaller the standard deviation, the more precise the analysis. The standard deviation is calculated by first obtaining the mean, or the arithmetic average, of all of the readings. A formula is then used to calculate how much the individual values vary from the mean—the standard deviation is the square root of the arithmetic average of the squares of the deviation from the mean. Many hand calculators have an automatic standard deviation function. See also Mean.

Standard reevaluation schedule (SRS): A schedule that determines the frequency that reevaluations should be performed on a property.

Standard reference material (SRM): A certified reference material produced by the National Institute of Standards and Technology (U.S. Department of Commerce) and characterized for absolute content independent of analytical method. See also Certified reference material.

Subsample: A representative portion of a sample. A subsample may be either a field sample or a laboratory sample. A subsample is often combined with other subsamples to produce a composite sample. See also Composite sample.

Substrate: A surface on which paint, varnish, or other coating has been applied or may be applied. Examples of substrates include wood, plaster, metal, and drywall.

Substrate effect: The radiation returned to an XRF analyzer by the paint, substrate, or underlying material, in addition to the radiation returned by any lead present. This radiation, when counted as lead x-rays by an XRF analyzer contributes to substrate equivalent lead (bias). The inspector may have to compensate for this effect when using XRF analyzers. See also XRF analyzer.





Substrate Equivalent Lead (SEL): The XRF measurement taken on an unpainted surface; used to calculate the corrected lead concentration on a surface by using the following formula: Apparent Lead Concentration—Substrate Equivalent Lead = Corrected Lead Concentration. See also Apparent Lead Concentration (ALC), Corrected Lead Concentration (CLC), and XRF analyzer.

Target housing: Any residential unit constructed before 1978, except dwellings that do not contain bedrooms or dwellings that were developed specifically for the elderly or persons with disabilities—unless a child younger than 6 resides or is expected to reside in the dwelling. In the case of jurisdictions that banned the sale or use of lead-based paint before 1978, the Secretary of HUD may designate an earlier date for defining target housing.

Targeted sample: A sample of dwelling units selected from an apartment building or housing development using information supplied by the owner. The units selected are likely to have the greatest probability of containing lead-based paint hazards. A targeted sample is usually selected for performing risk assessments in multifamily housing when it is not possible to select a worst-case sample. See also Worst-case sample and Random sample.

TCLP: See Toxicity Characteristic Leaching Procedure (TCLP).

Tertiary prevention: Providing medical treatment to children with elevated blood lead levels to prevent more serious injury or death.

Testing combination: A unique surface to be tested that is characterized by the room equivalent, component, substrate, and visible color.

Test location: A specific area on a testing combination where XRF instruments will test for lead-based paint.

Toxicity Characteristic Leaching Procedure (TCLP): A laboratory test to determine if excessive levels of lead or other hazardous materials could leach from a sample into groundwater; usually used to determine if waste is hazardous based on its toxicity characteristics.

Trained: Successful completion of a training course in a particular discipline. For lead hazard control work, the training course must be accredited by EPA or by an EPA-approved State program, pursuant to Title IV of the Toxic Substances Control Act.

Transporter: A person who transports hazardous waste, requiring a manifest under 40 CFR Part 260.10, within the United States by air, rail, highway, or water.

Treatment: In residential lead-based paint hazard control work, any method designed to control lead-based paint hazards. Treatment includes interim controls, abatement, and removal. Hazardous waste "treatment" is a method, technique, or process (such as neutralization) that is designed to change the physical, chemical, or biological character or composition of hazardous waste to neutralize it; render it nonhazardous or less hazardous; recover it; make it safer to transport, store, or dispose; or allow for easier recovery, storage, or volume reduction.

Treatment, Storage, and Disposal (TSD) facility: A facility licensed to handle hazardous waste.

Trisodium phosphate (TSP) detergent: A detergent that contains trisodium phosphate.

Trough: See Window trough.

Truck-mounted vacuum unit: A vacuum system whose components, except for hoses and attachments, are located outside the building undergoing dust removal. The exhaust is vented outside so that the interior dust is not disturbed.

TSD: See Treatment, Storage, and Disposal (TSD) facility.

TSP: See Trisodium phosphate (TSP) detergent.

 μ g (or ug): Micrograms. The prefix micromeans 1/1,000,000 (or one-millionth); a microgram is 1/1,000,000 of a gram and 1/1,000 of a milligram; equal to about 35/1,000,000,000 (35 billionths) of an ounce (an ounce is equal to 28,400,000 μ g).





Urethane-modified alkyd: An alkyd molecule that has been chemically modified by the incorporation of a urethane; a coating, often a varnish, that uses a urethane-modified alkyd resin in the binder.

Useful life: The life expectancy of a coating before it requires refinishing or some other form of maintenance.

VOC: See Volatile Organic Compound (VOC).

Volatile Organic Compound (VOC): Substances that vaporize or evaporate from a coating during the coating or curing process.

Walk-off mat: A washable, fibrous material (preferably with a rubber or vinyl backing) positioned at main entryways to reduce transport of lead dust and lead soil into a building or residence.

White lead: A white pigment, usually lead carbonate. See also Lead carbonate.

Window sill: See Interior window sill.

Window stool: See Interior window sill.

Window trough: For a typical double-hung window, the portion of the exterior window sill between the interior window sill (or stool) and the frame of the storm window. If there is no storm window, the window trough is the area that receives both the upper and lower window sashes when they are both lowered. Sometimes inaccurately called the window "well." See also Window well.

Window well: The space that provides exterior access and/or light to a window that is below grade, i.e., below the level of the surrounding earth or pavement. See also Window trough.

Worker: An individual who has completed training in an accredited program to perform lead-based paint hazard control in housing.

Worksite: Any interior or exterior area where lead-based paint hazard control work takes place.

Worksite preparation level: A set of measures designed to protect residents and the environment from leaded dust, paint chips, or other forms of lead contamination through the erection of barriers and the establishment of access control, resident relocation or movement restrictions, warning signs, ventilation, and other measures.

Worst-case sample: A sample of dwelling units having the greatest probability of containing lead-based paint hazards selected by a risk assessor on the basis of a visual examination of all dwelling units in a housing development or apartment building. See also Targeted sample and Random sample.

XRF analyzer: An instrument that determines lead concentration in milligrams per square centimeter (mg/cm²) using the principle of x-ray fluorescence (XRF). Two types of XRF analyzers are used—direct readers and spectrum analyzers. In these *Guidelines*, the term XRF analyzer only refers to portable instruments manufactured to analyze paint, and does not refer to laboratory-grade units or portable instruments designed to analyze soil.

Appendix 4

Inspector Certification



STATE OF CALIFORNIA DEPARTMENT OF PUBLIC HEALTH



LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:

CERTIFICATE TYPE:

NUMBER:

EXPIRATION DATE:

Lead Inspector/Assessor

LRC-00000459

5/31/2025

Lead Project Monitor

LRC-00000458

5/31/2025

Michelle Ehresman

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD

Appendix 5

CDPH 8552 Inspection Form

LEAD HAZARD EVALUATION REPORT

Section 1 — Date of Lead Hazard Evaluation	on 4/1/24					
Section 2 — Type of Lead Hazard Evaluation	on (Check o	ne box only)				
Lead Inspection Risk assessment Clearance Inspection Other (specify)						
Section 3 — Structure Where Lead Hazard	Evaluation '	Was Conducted				
Address [number, street, apartment (if applicable)]		City		County	Zip Code	
331 The City Drive (Building 8)		Orange		Orange	92868	
Construction date (year) of structure Type of structure Multi-unit building Single family dwelling						
Section 4 — Owner of Structure (if busines	ss/agency, li	st confact person)				
Name	, , ,	,	Teler	ohone number		
c/o Vanir Contruction (Scott Battles)			916-677-7024			
Address [number, street, apartment (if applicable)]	<u> </u>	City		State	Zip Code	
4540 Duckhorn Drive, Suite 300		Sacramento		CA	95834	
TOTO DUCKNOTH DITVE, Outle 300		Odcidificito		OA	33004	
Section 5 — Results of Lead Hazard Evalu	ation (check	all that apply)				
	Intact lead-ba	sed paint detected	minat	Deteriorated lead-base		
Section 6 — Individual Conducting Lead H	azard Evalu	ation				
Name			Tele	phone number		
Michelle Ehresman				58-537-3999		
Address [number, street, apartment (if applicable)]		City		State	Zip Code	
7742 Arjons Drive		San Diego		CA	92126	
CDPH certification number	Sign	ature			Date	
LRC 0459		1 1			4/18/24	
Name and CDPH certification number of any other	individuals cor	nducting sampling or testing	(if ap	plicable)		
,		,0 1 0 0	V -1	,,		
Section 7 — Attachments						
A. A foundation diagram or sketch of the structure lead-based paint; B. Each testing method, device, and sampling C. All data collected, including quality control of the structure of t	j procedure u	used;				
First copy and attachments retained by inspector		Third copy only (no a	ıttachı	ments) mailed or faxed to:		
Second copy and attachments retained by owner			oning way,	Prevention Branch Reports Building P, Third Floor	s	

Appendix 6

Renovate Right



AUTION CAUTION

CAUTION

CAUTION

CAUTION







1-800-424-LEAD (5323) www.epa.gov/getleadsafe EPA-740-K-10-001 April 2010



Important lead hazard information for families, child care providers and schools.





IT'S THE LAW!

Federal law requires contractors that disturb painted surfaces in homes, child care facilities and schools, built before 1978 to be certified and follow specific work practices to prevent lead contamination. Always ask to see your contractor's certification.

Federal law requires that individuals receive certain information before renovating more than six square feet of painted surfaces in a room for interior projects or more than twenty square feet of painted surfaces for exterior projects or window replacement or demolition in housing, child care facilities and schools built before 1978.

- Homeowners and tenants: renovators must give you this pamphlet before starting work.
- Child care facilities, including preschools and kindergarten classrooms, and the families of children under six years of age that attend those facilities: renovators must provide a copy of this pamphlet to child care facilities and general renovation information to families whose children attend those facilities.



WHO SHOULD READ THIS PAMPHLET?

This pamphlet is for you if you:

- Reside in a home built before 1978.
- Own or operate a child care facility, including preschools and kindergarten classrooms, built before 1978, or
- Have a child under six years of age who attends a child care facility built before 1978.

You will learn:

- Basic facts about lead and your health.
- How to choose a contractor, if you are a property owner.
- What tenants, and parents/guardians of a child in a child care facility or school should consider.
- How to prepare for the renovation or repair job.
- What to look for during the job and after the job is done.
- Where to get more information about lead.

This pamphlet is not for:

- Abatement projects. Abatement is a set of activities aimed specifically at eliminating lead or lead hazards. EPA has regulations for certification and training of abatement professionals. If your goal is to eliminate lead or lead hazards, contact the National Lead Information Center at 1-800-424-LEAD (5323) for more information.
- "Do-it-yourself" projects. If you plan to do renovation work yourself, this document is a good start, but you will need more information to complete the work safely. Call the National Lead Information Center at 1-800-424-LEAD (5323) and ask for more information on how to work safely

in a home with lead-based paint.

Contractor education. Contractors
 who want information about working
 safely with lead should contact
 the National Lead Information
 Center at 1-800-424-LEAD (5323)
 for information about courses and
 resources on lead-safe work practices.



RENOVATING, REPAIRING, OR PAINTING?



- Is your home, your building, or the child care facility or school your children attend being renovated, repaired, or painted?
- Was your home, your building, or the child care facility or school where your children under six years of age attend built before 1978?

If the answer to these questions is YES, there are a few important things you need to know about lead-based paint.

This pamphlet provides basic facts about lead and information about lead safety when work is being done in your home, your building or the child care facility or school your children attend.

The Facts About Lead

- Lead can affect children's brains and developing nervous systems, causing reduced IQ, learning disabilities, and behavioral problems. Lead is also harmful to adults.
- Lead in dust is the most common way people are exposed to lead. People can also get lead in their bodies from lead in soil or paint chips. Lead dust is often invisible.
- Lead-based paint was used in more than 38 million homes until it was banned for residential use in 1978.
- Projects that disturb painted surfaces can create dust and endanger you and your family. Don't let this happen to you. Follow the practices described in this pamphlet to protect you and your family.

LEAD AND YOUR HEALTH

Lead is especially dangerous to children under six years of age.

Lead can affect children's brains and developing nervous systems, causing:

- Reduced IQ and learning disabilities.
- Behavior problems.

Even children who appear healthy can have dangerous levels of lead in their bodies.

Lead is also harmful to adults. In adults, low levels of lead can pose many dangers, including:

- High blood pressure and hypertension.
- Pregnant women exposed to lead can transfer lead to their fetuses. Lead gets into the body when it is swallowed or inhaled.
- People, especially children, can swallow lead dust as they eat, play, and do other normal hand-to-mouth activities.
- People may also breathe in lead dust or fumes if they disturb lead-based paint.
 People who sand, scrape, burn, brush or blast or otherwise disturb lead-based paint risk unsafe exposure to lead.

What should I do if I am concerned about my family's exposure to lead?

- Call your local health department for advice on reducing and eliminating exposures to lead inside and outside your home, child care facility or school.
- Always use lead-safe work practices when renovation or repair will disturb painted surfaces.
- A blood test is the only way to find out if you or a family member already has lead poisoning. Call your doctor or local health department to arrange for a blood test.

For more information about the health effects of exposure to lead, visit the EPA lead website at www.epa.gov/lead/pubs/leadinfo.htm or call 1-800-424-LEAD (5323).

There are other things you can do to protect your family every day.

- Regularly clean floors, window sills, and other surfaces.
- Wash children's hands, bottles, pacifiers, and toys often.
- Make sure children eat a healthy, nutritious diet consistent with the USDA's dietary guidelines, that helps protect children from the effects of lead.
- Wipe off shoes before entering house.



WHERE DOES THE LEAD COME FROM?

Dust is the main problem.

The most common way to get lead in the body is from dust. Lead dust comes from deteriorating lead-based paint and lead-contaminated soil that gets tracked into your home. This dust may accumulate to unsafe levels. Then, normal hand to-mouth activities, like playing and eating (especially in young children), move that dust from surfaces like floors and window sills into the body.

Home renovation creates dust.

Common renovation activities like sanding, cutting, and demolition can create hazardous lead dust and chips.

Proper work practices protect you from the dust.

The key to protecting yourself and your family during a renovation, repair or painting job is to use lead-safe work practices such as containing dust inside the work area, using dust-minimizing work methods, and conducting a careful cleanup, as described in this pamphlet.

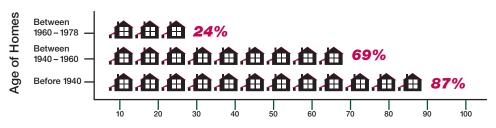
Other sources of lead.

Remember, lead can also come from outside soil, your water, or household items (such as lead-glazed pottery and lead crystal). Contact the National Lead Information Center at 1-800-424-LEAD (5323) for more information on these sources.



CHECKING YOUR HOME FOR LEAD-BASED PAINT

Percentage of Homes Likely to Contain Lead



Older homes, child care facilities, and schools are more likely to contain lead-based paint.

Homes may be single-family homes or apartments. They may be private, government-assisted, or public housing. Schools are preschools and kindergarten classrooms. They may be urban, suburban, or rural.

You have the following options:

You may decide to assume your home, child care facility, or school contains lead. Especially in older homes and buildings, you may simply want to assume lead-based paint is present and follow the lead-safe work practices described in this brochure during the renovation, repair, or painting job.

You can hire a certified professional to check for lead-based paint.

These professionals are certified risk assessors or inspectors, and can determine if your home has lead or lead hazards.

- A certified inspector or risk assessor can conduct an inspection telling you whether your home, or a portion of your home, has lead-based paint and where it is located. This will tell you the areas in your home where lead-safe work practices are needed.
- A certified risk assessor can conduct a risk assessment telling you if your home currently has any lead hazards from lead in paint, dust, or soil. The risk assessor can also tell you what actions to take to address any hazards.
- For help finding a certified risk assessor or inspector, call the National Lead Information Center at 1-800-424-LEAD (5323).

You may also have a certified renovator test the surfaces or components being disturbed for lead using a lead test kit. Test kits must be EPA-recognized and are available at hardware stores. They include detailed instructions for their use.

FOR PROPERTY OWNERS

You have the ultimate responsibility for the safety of your family, tenants, or children in your care.

This means properly preparing for the renovation and keeping persons out of the work area (see p. 8). It also means ensuring the contractor uses lead-safe work practices.

Federal law requires that contractors performing renovation, repair and painting projects that disturb painted surfaces in homes, child care facilities, and schools built before 1978 be certified and follow specific work practices to prevent lead contamination.

Make sure your contractor is certified, and can explain clearly the details of the job and how the contractor will minimize lead hazards during the work.

- You can verify that a contractor is certified by checking EPA's website at epa.gov/getleadsafe or by calling the National Lead Information Center at 1-800-424-LEAD (5323). You can also ask to see a copy of the contractor's firm certification.
- Ask if the contractor is trained to perform lead-safe work practices and to see a copy of their training certificate.
- Ask them what lead-safe methods they will use to set up and perform the job in your home, child care facility or school.
- Ask for references from at least three recent jobs involving homes built before 1978, and speak to each personally.

Always make sure the contract is clear about how the work will be set up, performed, and cleaned.

- Share the results of any previous lead tests with the contractor.
- You should specify in the contract that they follow the work practices described on pages 9 and 10 of this brochure.
- The contract should specify which parts of your home are part of the work area and specify which lead-safe work practices will be used in those areas. Remember, your contractor should confine dust and debris to the work area and should minimize spreading that dust to other areas of the home.
- The contract should also specify that the contractor will clean the work area, verify that it was cleaned adequately, and re-clean it if necessary.

If you think a worker is not doing what he is supposed to do or is doing something that is unsafe, you should:

- Direct the contractor to comply with regulatory and contract requirements.
- Call your local health or building department, or
- Call EPA's hotline 1-800-424-LEAD (5323).

If your property receives housing assistance from HUD (or a state or local agency that uses HUD funds), you must follow the requirements of HUD's Lead-Safe Housing Rule and the ones described in this pamphlet.

FOR TENANTS AND FAMILIES OF CHILDREN UNDER SIX YEARS OF AGE IN CHILD CARE FACILITIES AND SCHOOLS

You play an important role ensuring the ultimate safety of your family.

This means properly preparing for the renovation and staying out of the work area (see p. 8).

Federal law requires that contractors performing renovation, repair and painting projects that disturb painted surfaces in homes built before 1978 and in child care facilities and schools built before 1978, that a child under six years of age visits regularly, to be certified and follow specific work practices to prevent lead contamination.

The law requires anyone hired to renovate, repair, or do painting preparation work on a property built before

1978 to follow the steps described on pages 9 and 10 unless the area where the work will be done contains no lead-based paint.

If you think a worker is not doing what he is supposed to do or is doing something that is unsafe, you should:

- · Contact your landlord.
- · Call your local health or building department, or
- Call EPA's hotline 1-800-424-LEAD (5323).

If you are concerned about lead hazards left behind after the job is over, you can check the work yourself (see page 10).



PREPARING FOR A RENOVATION

The work areas should not be accessible to occupants while the work occurs.

The rooms or areas where work is being done may need to be blocked off or sealed with plastic sheeting to contain any dust that is generated. Therefore, the contained area may not be available to you until the work in that room or area is complete, cleaned thoroughly, and the containment has been removed. Because you may not have access to some areas during the renovation, you should plan accordingly.

You may need:

- Alternative bedroom, bathroom, and kitchen arrangements if work is occurring in those areas of your home.
- A safe place for pets because they too can be poisoned by lead and can track lead dust into other areas of the home.
- A separate pathway for the contractor from the work area to the outside in order to bring materials in and out of the home. Ideally, it should not be through the same entrance that your family uses.
- A place to store your furniture. All furniture and belongings may have to be moved from the work area while the work is being done. Items that can't be moved, such as cabinets, should be wrapped in plastic.
- To turn off forced-air heating and air conditioning systems while the work is being done. This prevents dust from spreading through vents from the work area to the rest of your home. Consider how this may affect your living arrangements.

You may even want to move out of your home temporarily while all or part of the work is being done.

Child care facilities and schools may want to consider alternative accommodations for children and access to necessary facilities.



DURING THE WORK

Federal law requires contractors that are hired to perform renovation, repair and painting projects in homes, child care facilities, and schools built before 1978 that disturb painted surfaces to be certified and follow specific work practices to prevent lead contamination.

The work practices the contractor must follow include these three simple procedures, described below:

- 1. Contain the work area. The area must be contained so that dust and debris do not escape from that area. Warning signs must be put up and plastic or other impermeable material and tape must be used as appropriate to:
 - Cover the floors and any furniture that cannot be moved.
 - Seal off doors and heating and cooling system vents.

These will help prevent dust or debris from getting outside the work area.

2. Avoid renovation methods that generate large amounts of lead-contaminated dust.

Some methods generate so much lead-contaminated dust that their use is prohibited.

They are:

- · Open flame burning or torching.
- Sanding, grinding, planing, needle gunning, or blasting with power tools and equipment not equipped with a shroud and HEPA vacuum attachment.
- Using a heat gun at temperatures greater than 1100°F.

There is no way to eliminate dust, but some renovation methods make less dust than others. Contractors may choose to use various methods to minimize dust generation, including using water to mist areas before sanding or scraping; scoring paint before separating components; and prying and pulling apart components instead of breaking them.

- **3. Clean up thoroughly.** The work area should be cleaned up daily to keep it as clean as possible. When all the work is done, the area must be cleaned up using special cleaning methods before taking down any plastic that isolates the work area from the rest of the home. The special cleaning methods should include:
 - Using a HEPA vacuum to clean up dust and debris on all surfaces, followed by
 - Wet wiping and wet mopping with plenty of rinse water.

When the final cleaning is done, look around. There should be no dust, paint chips, or debris in the work area. If you see any dust, paint chips, or debris, the area must be re-cleaned.

FOR PROPERTY OWNERS: AFTER THE WORK IS DONE

When all the work is finished, you will want to know if your home, child care facility, or school has been cleaned up properly. Here are some ways to check.

Ask about your contractor's final cleanup check. Remember, lead dust is often invisible to the naked eye. It may still be present even if you cannot see it. The contractor must use disposable cleaning cloths to wipe the floor of the work area and compare them to a cleaning verification card to determine if the work area was adequately cleaned.

To order a cleaning verification card and detailed instructions visit the EPA lead website at www.epa.gov/lead or contact the National Lead Information Center at 1-800-424-LEAD (5323) or visit their website at www.epa.gov/lead/nlic.htm.

You also may choose to have a lead-dust test. Lead-dust tests are wipe samples sent to a laboratory for analysis.

- You should specify in your contract that a lead-dust test will be done. In this case, make it clear who will do the testing.
- Testing should be done by a lead professional.

If you choose to do the testing, some EPA-recognized lead laboratories will send you a kit that allows you to collect samples and send them back to the lab for analysis.

Contact the National Lead Information Center at 1-800-424-LEAD (5323) for lists of qualified professionals and EPA-recognized lead labs.

If your home, child care facility, or school fails the dust test, the area should be re-cleaned and tested again.

Where the project is done by contract, it is a good idea to specify in the contract that the contractor is responsible for re-cleaning if the home, child care facility, or school fails the test.



FOR ADDITIONAL INFORMATION

You may need additional information on how to protect yourself and your children while a job is going on in your home, your building, or child care facility.

The National Lead Information Center at 1-800-424-LEAD (5323) or www.epa.gov/lead/nlic.htm can tell you how to contact your state, local, and/or tribal programs or get general information about lead poisoning prevention.

- State and tribal lead poisoning prevention or environmental protection programs can provide information about lead regulations

 and potential sources of force is laid for reducing.
- and potential sources of financial aid for reducing lead hazards. If your state or local government has requirements more stringent than those described in this pamphlet, you must follow those requirements.
- Local building code officials can tell you the regulations that apply to the renovation work that you are planning.
- State, county, and local health departments can provide information about local programs, including assistance for lead-poisoned children and advice on ways to get your home checked for lead.

The National Lead Information Center can also provide a variety of resource materials, including the following guides to lead-safe work practices. Many of these materials are also available at www.epa.gov/lead/pubs/brochure.htm.

- Steps to Lead Safe Renovation, Repair and Painting.
- Protect Your Family from Lead in Your Home
- Lead in Your Home: A Parent's Reference Guide





For the hearing impaired, call the Federal Information Relay Service at 1-800-877-8339 to access any of the phone numbers in this brochure.

10

OTHER FEDERAL AGENCIES

EPA Regional Offices

EPA addresses residential lead hazards through several different regulations.

EPA requires training and certification for conducting abatement and renovations, education about hazards associated with renovations, disclosure about known lead paint and lead hazards in housing, and sets lead-paint hazard standards.

Your Regional EPA Office can provide further information regarding lead safety and lead protection programs at **epa.gov/lead**.

Region 1

(Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island, Vermont) Regional Lead Contact U.S. EPA Region 1 Suite 1100 One Congress Street Boston, MA 02114-2023 (888) 372-7341

Region 2

(New Jersey, New York, Puerto Rico, Virgin Islands) Regional Lead Contact U.S. EPA Region 2 2890 Woodbridge Avenue Building 205, Mail Stop 225 Edison, NJ 08837-3679 (732) 321-6671

Region 3

(Delaware, Maryland, Pennsylvania, Virginia, Washington, DC, West Virginia) Regional Lead Contact U.S. EPA Region 3 1650 Arch Street Philadelphia, PA 19103-2029 (215) 814-5000

Region 4

(Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee) Regional Lead Contact U.S. EPA Region 4 61 Forsyth Street, SW Atlanta, GA 30303-8960 (404) 562-9900

Region 5

(Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin) Regional Lead Contact U.S. EPA Region 5 77 West Jackson Boulevard Chicago, IL 60604-3507 (312) 886-6003

Region 6

(Arkansas, Louisiana, New Mexico, Oklahoma, Texas) Regional Lead Contact U.S. EPA Region 6 1445 Ross Avenue, 12th Floor Dallas, TX 75202-2733 (214) 665-6444

Region 7

(Iowa, Kansas, Missouri, Nebraska) Regional Lead Contact U.S. EPA Region 7 901 N. 5th Street Kansas City, KS 66101 (913) 551-7003

Region 8

(Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming) Regional Lead Contact U.S. EPA Region 8 1595 Wynkoop Street Denver, CO 80202 (303) 312-6312

Region 9

(Arizona, California, Hawaii, Nevada) Regional Lead Contact U.S. Region 9 75 Hawthorne Street San Francisco, CA 94105 (415) 947-8021

Region 10

(Alaska, Idaho, Oregon, Washington) Regional Lead Contact U.S. EPA Region 10 1200 Sixth Avenue Seattle, WA 98101-1128 (206) 553-1200

CPSC

The Consumer Product Safety
Commission (CPSC) protects the public
from the unreasonable risk of injury or
death from 15,000 types of consumer
products under the agency's jurisdiction.
CPSC warns the public and private
sectors to reduce exposure to lead and
increase consumer awareness. Contact
CPSC for further information regarding
regulations and consumer product safety.

CPSC

4330 East West Highway Bethesda, MD 20814 Hotline 1-(800) 638-2772 www.cpsc.gov

CDC Childhood Lead Poisoning Prevention Branch

The Centers for Disease Control and Prevention (CDC) assists state and local childhood lead poisoning prevention programs to provide a scientific basis for policy decisions, and to ensure that health issues are addressed in decisions about housing and the environment. Contact CDC Childhood Lead Poisoning Prevention Program for additional materials and links on the topic of lead.

CDC Childhood Lead Poisoning Prevention Branch

4770 Buford Highway, MS F-40 Atlanta, GA 30341 (770) 488-3300 www.cdc.gov/nceh/lead

HUD Office of Healthy Homes and Lead Hazard Control

The Department of Housing and Urban Development (HUD) provides funds to state and local governments to develop cost-effective ways to reduce lead-based paint hazards in America's privately-owned low-income housing. In addition, the office enforces the rule on disclosure of known lead paint and lead hazards in housing, and HUD's lead safety regulations in HUD-assisted housing, provides public outreach and technical assistance, and conducts technical studies to help protect children and their families from health and safety hazards in the home. Contact the HUD Office of Healthy Homes and Lead Hazard Control for information on lead regulations, outreach efforts, and lead hazard control research and outreach grant programs.

U.S. Department of Housing and Urban Development

Office of Healthy Homes and Lead Hazard Control 451 Seventh Street, SW, Room 8236 Washington, DC 20410-3000 HUD's Lead Regulations Hotline (202) 402-7698 www.hud.gov/offices/lead/

12



SAMPLE PRE-RENOVATION FORM

This sample form may be used by renovation firms to document compliance with the Federal pre-renovation education and renovation, repair, and painting regulations.

Occupant Confirmation Pamphlet Receipt

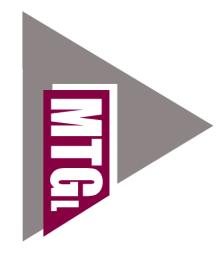
□ I have received a copy of the lead hazard info potential risk of the lead hazard exposure fro dwelling unit. I received this pamphlet befor	om renovation activity to be performed in my
Printed Name of Owner-occupant	
Signature of Owner-occupant	Signature Date
Renovator's Self Certification Option (for tend Instructions to Renovator: If the lead hazard int signature was not obtainable, you may check t	formation pamphlet was delivered but a tenant
pamphlet to the rental dwelling unit listed b	faith effort to deliver the lead hazard information elow at the date and time indicated and that the of receipt. I further certify that I have left a copy nt.
was unavailable to sign the confirmation of r	ave made a good faith effort to deliver the lead lwelling unit listed below and that the occupant receipt. I further certify that I have left a copy of the door or by (fill in how pamphlet was left).
Printed Name of Person Certifying Delivery	Attempted Delivery Date
Signature of Person Certifying Lead Pamphlet	Delivery
Unit Address	

Note Regarding Mailing Option — As an alternative to delivery in person, you may mail the lead hazard information pamphlet to the owner and/or tenant. Pamphlet must be mailed at least seven days before renovation. Mailing must be documented by a certificate of mailing from the post office.

COMPREHENSIVE ASBESTOS SURVEY REPORT FOR DEMOLITION

PROJECT NAME:

ORANGE COUNTY JUVENILE HALL-BUILDING 9 (ROOMS 15, 16, 17, 18)



PROJECT ADDRESS:

331 The City Drive, S. Orange, California 92868

Prepared for:

Mr. Scott L. Battles Vanir Construction Management, Inc 4540 Duckhorn Drive, Suite 300 Sacramento, California 95834

Prepared by:

MTGL, Inc. 7742 Arjons Dr. San Diego, California 92126 858-537-3999

Project Number:

SDPE-24-061.1CT

Report By:

Michelle Ehresman, CAC
CAC Certification Number: 14-5323

CAC Expiration Date: November 19, 20204

Date of Report:

April 18, 2024

Version 1.0

TABLE OF CONTENTS

INTRODUCTIONSection 1
General Information
Project Information
Site/Building Description
Suspect Materials Observed
INVESTIGATION LIMITATIONS & WARRANTYSection 2
ASBESTOS SURVEY METHODOLOGYSection 3
General References
Visual Inspection
Homogeneous Material Classifications
Sampling Procedures
Laboratory Procedures
Method of Analysis
Laboratory Quality Control Program
ASBESTOS SURVEY OBSERVATIONS AND FINDINGS Section 4
Summary
Table 1: Positively Identified Materials that Contain Asbestos (ACM and ACCM) and
Assessment of Material Condition.
Table 2: Materials found to be Negative for Asbestos
General Information
Environmental Protection Agency (EPA)
California Occupational Safety & Health Agency (Cal/OSHA)
National Emission Standards for Hazardous Air Pollutants (NESHAP)
CONCLUSIONS & RECOMMENDATIONS Section 5
APPENDICES Section 6
Appendix 1 – Asbestos Laboratory Results & Chain of Custodies
Appendix 2 – Site Map with Sample Location
Appendix 3 – Photo Documentation
Appendix 4 – Inspector Certifications

SECTION 1 INTRODUCTION

GENERAL INFORMATION

MTGL, Inc. was retained to conduct a survey for suspect asbestos containing materials. The intent of this survey is to pre-determine the presence of EPA/OSHA regulated Asbestos Containing Materials and Asbestos Containing Construction Materials (ACCM) that may need to be addressed prior to scheduled demolition and/or renovation activities.

Buildings 2, 5, 7 and 9 shared the same homogeneous silver rolled roofing system and black roofing mastic. Samples collected were representative of the shared roofing materials.

MTGL's scope of work was limited to the following:

- Review of project drawings.
- Conduct a pre-construction asbestos inspection limited to Client specified locations in accordance with NESHAP Regulations and the collection of bulk samples of suspect ACM.
- Submit samples to a NVLAP accredited laboratory for analysis of asbestos fiber content using polarized-light microscopy.
- Prepare report with material description, sampling locations, analytical results, and recommendations for proper handling/abatement prior to demolition and/or renovation activities.

PROJECT INFORMATION

Survey Requested/Authorized By: Mr. Scott L. Battles

Type of Survey Requested: Limited (Restricted to Client Specified Locations Only)

Destructive Sampling Allowed by Client: Yes

Project Name: ORANGE COUNTY JUVENILE HALL BUILDING 9 (ROOMS 15, 16, 17, 18)

Project Address: 331 The City of Orange Dr. S in the city of Orange in the State of California.

Date of Inspection: April 1, 2024 to April 2, 2024

AHERA Certified Building Inspector Name: Darla Beery

AHERA Certified Building Inspector Number: 2023ABCA171101

Additional AHERA Certified Building Inspector Name: Michelle Ehresman

Additional AHERA Certified Building Inspector Number: ABIR0727230010N35227

Local Air District: South Coast Air Quality Management District (Sampling method, lab

qualifications, lab analytical procedures, and lab method of analysis were

performed in compliance with Rule 1403 (d)(1)(A) and 40 CFR Part 763 - Asbestos. requirments)

Laboratory: EMLab P&K, LLC – ID#: 3609724/3600732

9445 Farnham St, Suite 103, San Diego, CA 92123

(866) 888-6653 Fax (623) 780-7695 www.emlab.com

Laboratory Sample Analysis Method: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA

METHOD 600/R-93-116, SOP EM-AS-S-1267)

Sampling Protocols: EPA 40CFR 763.86 Methods

SITE/BUILDING DESCRIPTION

Structure Type: Commercial Facility

Year Built: Unknown

Date of known additions: Unknown

Building Structural Damage (If Any): None Observed

Approximate Square Feet of Surveyed Area: 3,500

Structure Frame: Wood

If other, describe: None

Structure Foundation: Concrete Slab On Grade

If other, describe: None

Number of Floors: 1

Building Occupied: Yes

SUSPECT MATERIALS OBSERVED

Suspect Materials Observed During the Asbestos Survey Conducted

- Pipe Insulation w/Wrap and Pipe Elbow Wrap
- Textured Drywall and Unfinished Drywall
- Concrete Block
- Cove Base Glue
- Carpet Adhesive
- Ceramic Floor and Wall Tile
- Wall Plaster
- 1'x1' Pinhole Ceiling Tile and Fissured Ceiling Tile
- Concrete Sidewalk and Concrete Flooring
- 1'x1'Vinyl Floor Tile (Over Sheet Vinyl)
- HVAC Caulk
- Window Putty
- Brick and Mortar
- Rolled Roofing and Roof Mastic

Inaccessible Materials Presumed to be Asbestos Content: None

SECTION 2 INVESTIGATION LIMITATIONS & WARRANTY

Per the agreement between The Client and MTGL, Inc., the scope of services was performed as described in this report.

The intent of this survey is to pre-determine the presence of EPA/OSHA regulated asbestos containing building materials that may need to be addressed prior to scheduled demolition and/or renovation activities.

INVESTIGATION LIMITATIONS

MTGL, Inc. did not conduct testing within interstitial wall cavities, ceiling plenums, HVAC ventilation systems or crawlspaces or other locations of the facility, outside of the Client specified areas.

The findings of this report are valid as of the date of the survey and sample collection. Changes in the condition of the property can occur with passage of time, whether they are due to natural processes or the works of man on this or adjacent properties. In addition, changes in the state-of-art technology and/or government codes may occur. Due to such changes, the findings of this report may be invalidated wholly or in part by conditions beyond our control. Due to changes that can occur over time, submittals of this report to Regulatory Agencies may require additional site visits and assessment to document current conditions.

The final assessment of the potential for the existence of hazardous contaminants at the site should be considered a professional opinion based on the data obtained during the investigation and should not be considered a definitive statement that a hazardous contaminant or conditions are, or is not, present in the area of study. These opinions have been derived in accordance with current standards of practice.

This report is intended solely for use by the parties to whom it is addressed. This report is not intended for and may not contain sufficient information for purposes other than qualitative evaluation of asbestos or conditions at the time of our evaluation. Reliance on this report for other purposes or by other parties shall be at the user's sole risk.

WARRANTY

MTGL, Inc. warrants that the findings contained herein have been prepared with the level of care and skill exercised by experienced and knowledgeable environmental consultants who are appropriately licensed or otherwise trained to perform asbestos inspections and assessments pursuant to the scope of work required on this project. MTGL's Asbestos Survey Reports are prepared by trained certified professionals without a conflict of interest in the demolition(s) or renovation project(s) as per the Business and Professions Code 7180 (BP7180).

MTGL, Inc. warrants that the findings contained herein have been prepared in general accordance with accepted professional practices as applied by similar professionals in the community at the time of its preparation. Changes in the state of the art or in applicable regulations cannot be anticipated and have not been addressed in this report.

The survey included inspection of visible and accessible materials. MTGL did not inspect or sample inaccessible areas and did not dismantle any part of the structure to survey inaccessible areas. For the purpose of this warranty, inaccessible is defined as areas that could not be tested (sampled) without destruction of the structure or a portion of the structure. Inaccessible materials that are visible to MTGL's inspectors shall be assumed to be asbestos containing. No other warranty is expressed, or implied.

SECTION 3 ASBESTOS SURVEY METHODOLOGY

GENERAL REFERENCES

The asbestos survey consisted of two major activities: visual inspection and sampling. Although these activities are listed separately, they are integrated tasks.

VISUAL INSPECTION

The visual inspection was performed by an AHERA Certified Building Inspector under the direction of a California Certified Asbestos Consultant. An initial building walkthrough was conducted to determine the presence of suspect materials that were accessible or exposed. Materials that were similar in general appearance were grouped into homogeneous sampling areas.

HOMOGENEOUS MATERIAL CLASSIFICATIONS

A preliminary walkthrough of the building was conducted to determine areas of materials that were visually similar in color, texture, and general appearance and that appeared to have been installed at the same time. Such materials are termed "homogeneous materials" by the EPA. During this walkthrough, the approximate locations of these homogeneous materials were noted. Only materials that were accessible or exposed and suspected to contain asbestos were identified.

Following the EPA protocols, each identified suspect homogeneous material is placed in one of the following EPA classifications:

- Surfacing Materials (spray or trowel applied materials)
- Thermal System Insulation (materials applied to various mechanical systems)
- Miscellaneous Materials (any material which do not fit either of the above categories, such as floor tiles, etc.)

SAMPLING PROCEDURES

Following the walkthrough, the inspector collected selected samples of exposed or accessible materials identified as suspect material. Sampling was limited to accessible materials not involving destruction of walls, other building elements, physical barriers, or the structural integrity of the item being tested.

EPA guidelines were used to determine the sampling protocol. Sampling locations that were chosen to be representative of the homogeneous sampling area. While an effort was made to collect samples randomly, samples were taken preferentially from damaged areas or areas which were the least visible to minimize disturbance of the material.

Samples of surfacing material were collected in general accordance with the EPA random sampling protocol outlined in the EPA publication, "Asbestos in Buildings: Simplified Sampling Scheme for Friable Surfacing Materials" (EPA 560/5-85-030a, October 1985).

Samples of miscellaneous materials were also taken as randomly as possible, while attempting to sample already damaged areas so as to minimize disturbance of the material.

A minimum of three samples were collected of each homogeneous material. Depending on the quantity of homogeneous material, additional samples may be collected to avoid the possibility of false negative results.

LABORATORY PROCEDURES

Method of Analysis

Analysis was performed by visually observing the bulk sample and preparing slides for microscopic examination and identification. The samples were mounted on slides and then analyzed for asbestos (chrysotile, amosite, crocidolite, anthophyllite, and actinolite/tremolite), fibrous non-asbestos constituents (mineral wool, paper, etc.) and nonfibrous constituents. Asbestos was identified by refractive indices, morphology, color, pleochroism, birefringence, extinction characteristics, and signs of elongation. The same characteristics were used to identify the non-asbestos constituents.

The microscopist used a stereoscope to visually estimate relative amounts of each constituent using a stereoscope to determine the volume of each constituent in proportion to the total volume of the sample.

All bulk samples were analyzed by Polarized Light Microscopy (PLM) with dispersion staining as described by the Interim Method of the Determination of Asbestos in Bulk Insulation, Federal Register, 40 CFR Ch. 1 Pt. 763, App. A to Subpart. F, July 1, 1987. This is a standard method of analysis in optical mineralogy and the currently accepted method for the determination of asbestos in bulk samples. A suspect material is immersed in a solution of known refractive index and subjected to illumination by polarized light. The characteristic color displays that result enable mineral identification. It should be noted that some ACM may not be accurately identified or quantified by PLM. As an example, the original fabrication of vinyl floor tiles routinely involved milling of asbestos fibers to extremely small sizes. As a result, these fibers may go undetected under the standard polarized light microscopy method. Transmission Electron Microscopy (TEM) is recommended for a more definitive analysis of these materials. MTGL, Inc. has no control over how the laboratory describes materials or layers of materials being analyzed. Although a minimum of three samples are collected of suspect building materials, first positive stops may be requested of the laboratory and the results of the one positive sample will be reported. All other homogeneous materials will be assumed to be positive for asbestos content.

Laboratory Quality Control Program

MTGL, Inc. only uses laboratories that maintain an in-house quality control program. This program involves blind reanalysis of ten percent of all samples, precision and accuracy controls, and use of standard bulk reference materials.

SECTION 4 ASBESTOS OBSERVATIONS AND FINDINGS

SUMMARY

Table 1: Positively Identified Materials that Contain Asbestos (ACM and ACCM) and Assessment of Material Condition (as of the date the survey was conducted). Laboratory Results can be found in Appendix 1.

Material* Description	Location*	Sample #	Approximate Quantity**	AHERA Rank**	Friability/ Material Type	Damage Category	Quantity of Contamination (If any) **	Asbestos Content
Pipe Insulation Wrap	Throughout	3	Undetermined as wrap may run behind walls or inside soffits.	7	Friable	1	None	Yellow Insulation None Detect Black Wrap 7%
Pipe Elbow Insulation	Throughout	55	Undetermined as wrap may run behind walls or inside soffits.	7	Friable	1	None	15% Chrysotile 5% Amosite
Note: Samples	s 56-57 were not an	alyzed due	to prior positive s	eries.	I		I	
Roof Mastic (See below note.)	Building 2 (Under Vinyl Cap Sheet on North End)	R-14	1,800	X	Non-Friable	1	None	4%

Note: Sample R14 (roof mastic) pertains only to the <u>North end of Building 2</u> under vinyl cap sheet. Sample is included with report as it is a part of the same Chain of Custody (COC) and lab report as the remainder of the samples for Bldgs. 2, 5, 7 and 9.

*Positively identified ACM and ACCM that are similar in color and texture in other locations throughout the structure and facility shall be considered as asbestos containing until further sampling/analysis determines otherwise. In the event suspect asbestos containing materials are discovered during maintenance, renovation and/or demolition that are not identified in this report, disturbance of the materials should be stopped until further assessment of the material for asbestos content can be conducted.

**MTGL, Inc. is not responsible for actual quantity of the material(s). MTGL recommends bidding contractors measure and calculate quantities for estimated abatement costs and notifications. (sf= square foot; NA= not applicable))

- (1) Damaged or significantly damaged thermal system insulation ACM.
- (2) Damaged friable surfacing ACM.
- (3) Significantly damaged friable surfacing ACM.
- (4) Damaged or significantly damaged friable miscellaneous ACM.
- (5) ACBM with potential for damage.
- (6) ACBM with potential for significant damage.

Limited Asbestos Survey Report * Vanir Construction * Juvenile Hall-331 The City of Orange, CA 92868 * Building 9 * April 18, 2024

^{***}Each homogeneous area of friable and non-friable asbestos-containing material (ACM) was classified into one of the following seven categories, as specified in EPA's AHERA regulations (40 CFR 763.88):

- (7) Any remaining friable ACBM or friable suspected ACBM.
- (X) Not applicable (material is non-friable surfacing or miscellaneous material).

The damage categories are defined as follows:

Category 1 - "Undamaged" means the material had no visible damage, or extremely minor damage or surface marring (i.e., a room full of floor tile with only two or three small corners chipped off on the tile).

Category 2 - "Damaged" means the material had visible damage evenly distributed over less than 10% of its surface, or localized over less than 25% of its surface.

Category 3 - "Significantly Damaged" means the material had visible damage that is evenly distributed over 10% or more of its surface, or localized over 25% or more if its surface.

Table 2: Materials found to be Negative for Asbestos (as of the date the survey was conducted). Laboratory results can be found in Appendix 1.

Material* Description	Sample #
Textured Drywall	4, 5, 6
Concrete Block	7, 8, 9
Cove Base Glue	10, 11, 12
Carpet Adhesive	13, 14,15
Tan Ceramic Floor Tile and Mortar	16, 17, 18
Cermic Wall Tile and Mortar	19, 20, 21
Wall Plaster	22, 23, 24
Green Ceramic Floor Tile and Mortar	25, 26, 27
Ceiling Tile w/ Adhesive	28, 29, 30
Concrete Sidewalk	31, 32, 33
Concrete Flooring	34,3 35, 36
1'x1' Vinyl Floor Tile over Gray Sheet Flooring	37, 38, 39
Fissured Ceiling Tile	40, 41, 42
Unfinished Drywall (Ceiling)	43, 44, 45
Brick and Mortar	46, 47, 48
HVAC Caulking	49, 50 ,51

Window Putty	52, 53, 54
Samples R-1 through R-13 are Homogeneous to the and 9.	shared roofing systems for Building 2, 5, 7
Silver Rolled Roofing over Insulation	R-1, R2, R3, R-4, R-5
Roof Mastic	R-6, R-7, R-8, R-9, R-10
HVAC Caulk	R-11. R12, R-13

GENERAL INFORMATION

Environmental Protection Agency (EPA)

According to the South Coast Air Quality Management District's Rule 1402 paragraph (H)(2)(C), the analysis of composite samples of multi-layered material including, but not limited to, stucco (base and scratch coat) and wall systems is prohibited for the quantification of asbestos content. All separable layers shall be analyzed and reported separately for asbestos content.

These materials are eligible for analyzed using 1,000 Point Count with Gravimetric Reduction methods. Analysis would be conducted per strata and materials found to be greater than 0.1% asbestos are regulated by OSHA and handled as asbestos containing until packaged and stored for disposal. Materials greater than 1% are regulated by EPA/APCD and would require disposal as asbestos containing material.

A material is considered by the EPA and the State of California to be asbestos-containing if at least one sample collected from the area shows asbestos present in an amount greater than one percent (>1%).

California Occupational Safety & Health Agency (Cal/OSHA)

Title 8, California Code of Regulation 1529 defines asbestos-containing construction materials as materials containing greater than one-tenth of one percent (0.1%) asbestos by weight. Under this code, materials containing between 0.1% and 1% asbestos are regulated as other regulated operations. Although operations involving materials containing between 0.1% and 1% asbestos are not considered Class I, II, or III work, several sections of the standard are applicable, including negative exposure assessments and the use of regulated areas.

Laboratory analysis may report materials as "Trace Asbestos". These materials are assumed to be greater than 0.1%. Upon client request, these materials can be analyzed using 1,000 Point Count with Gravimetric Reduction methods. Materials found to be greater than 0.1% asbestos are regulated by OSHA and handled as asbestos containing until packaged and stored for disposal.

Please refer to the laboratory analysis for a more detailed description of the microscopic analysis of these samples.

Asbestos-containing materials (ACM) are regulated by federal, state, and local agencies, which include but may not be limited to the following:

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) requires an inspection for asbestos be done on facilities that are to undergo demolition or renovation work. Materials found to contain asbestos may need to be removed prior to the start of such demolition/renovation work.

NESHAP defines Category I non-friable asbestos-containing materials as gaskets, resilient floor covering, and asphalt roofing products that contain more than one percent asbestos, and Category II non-friable as any materials, except for Category I non-friable, that contain more than one percent asbestos and cannot be reduced to a powder by hand pressure when dry. NESHAP defines a Regulated Asbestos-Containing Material (RACM) as: (a) friable ACM, (b) Category I non-friable that has become friable, (c) Category I non-friable that has or may be subject to sanding, grinding, cutting, or abrading, and (d) Category II non-friable that may or has become friable during demolition or renovation.

SECTION 5 CONCLUSIONS & RECOMMENDATIONS

CONCLUSIONS

On this asbestos survey, materials observed and tested for asbestos were positive for asbestos content.

The pipe insulation wrap reported to contain >1% asbestos.

The pipe elbow insulation was reported to contain >1% asbestos.

While the silver coated rolled roofing and roofing mastic is negative for asbestos on Building 9, sample R14 (roof mastic) pertains only to North end of Building 2 under vinyl cap sheet. The sample is included with report as it is a part of the same Chain of Custody (COC) and lab report as the remainder of the samples for Buildings 2, 5, 7 and 9.

RECOMMENDATIONS

If during renovation activities, materials other than the ones discussed in this report are observed, the materials should be tested for asbestos content prior to disturbance.

General

MTGL recommends that all asbestos containing materials be removed prior to any renovation and/or demolition activities, which may impact the materials. A Licensed Abatement Contractor in the State of California should perform the removal activities.

Removal of ACM/ACCM should be conducted in accordance with EPA and OSHA requirements for Federal, State and Local rules and regulations. All asbestos removal should be conducted using wet methods and engineering controls to reduce airborne fiber concentrations. OSHA required personal protective equipment must be used for worker protection. All activities that may disturb or disrupt asbestos containing material must be conducted in properly demarcated regulated areas using wet removal methods.

Proper decontamination methods must be used by all workers entering and leaving regulated work areas where asbestos containing materials are being removed.

In the event ACM or ACCM materials are observed to be damaged and/or visible contamination is present, isolate the immediate area, turn off HVAC systems. Only properly trained and certified workers may enter the work area to conducted clean-up activities using wet methods.

If renovation and/or demolition activities do not impact the asbestos containing materials, then the materials can be managed in place. Periodic surveillance is recommended. An Operations & Maintenance (O&M) program should be established and conducted by properly trained personnel. Minimum training for each type of material that has been identified should be given as required by Cal/OSHA. Additionally, postings would be required in all publicly accessible areas warning of the potential hazard to satisfy the Proposition 65 & Hazard Communication regulations.

SECTION 6 APPENDICES

APPENDIX 1 ASBESTOS LABORATORY RESULTS & CHAIN OF CUSTODY



Report for:

Mr. Carl Tucker MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126

Eurofins EPK Built Environment Testing, LLC Project: Vanir Const. - OC Juvenile Hall; 331 The City of Orange Bldg 9 Regarding:

EMĹ ID: 3600724

Approved by:

Dates of Analysis: Asbestos PLM: 04-12-2024

EMLab ID: 3600724, Page 1 of 15

Approved Signatory Carlos Rivadeneyra

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267) NVLAP Lab Code 500034-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Date of Sampling: 04-01-2024 Date of Receipt: 04-08-2024 Date of Report: 04-12-2024

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of Orange Bldg 9

ASBESTOS PLM REPORT

Total Samples Submitted: 57

Total Samples Analyzed: 55

Lab ID-Version 1: 17611086-1

Lab ID-Version : 17611087-1

Lab ID-Version 1: 17611088-1

Lab ID-Version : 17611089-1

EMLab ID: 3600724, Page 2 of 15

Total Samples with Layer Asbestos Content > 1%: 2

Location: 1. Pine Insulation w/Wran

Location: 1,1 Tpc Institution W/ Wrap	·
Sample Layers	Asbestos Content
Yellow Insulation	ND
Black Wrap	ND
Composite Non-Asbestos Content:	80% Glass Fibers
	15% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 2, Pipe Insulation w/Wrap

Sample Layers	Asbestos Content
Yellow Insulation	ND
Black Wrap	ND
Composite Non-Asbestos Content:	80% Glass Fibers 15% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 3. Pipe Insulation w/Wrap

Sample Layers	Asbestos Content	
Yellow Insulation	ND	
Black Wrap	7% Chrysotile	
Composite Non-Asbestos Content: 80% Glass Fibers 15% Cellulose		
Sample Composite Homogeneity:	Moderate	

Location: 4, Textured Drywall

Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
White Texture	ND
White Paint	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

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Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange Bldg 9

Date of Sampling: 04-01-2024 Date of Receipt: 04-08-2024 Date of Report: 04-12-2024

ASBESTOS PLM REPORT

Location: 5, Textured Drywall

Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
White Texture	ND
White Paint	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

Location: 6, Textured Drywall

Lab ID-Version : 17611091-1

Lab ID-Version : 17611090-1

Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
White Paint	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 7, Concrete Block

Lab ID-Version : 17611092-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 8, Concrete Block

Lab ID-Version 1: 17611093-1

EMLab ID: 3600724, Page 3 of 15

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

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Lab ID-Version : 17611094-1

Lab ID-Version †: 17611097-1

EMLab ID: 3600724, Page 4 of 15

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

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Date of Sampling: 04-01-2024 Date of Receipt: 04-08-2024 Date of Report: 04-12-2024

ASBESTOS PLM REPORT

Location: 9, Concrete Block

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 10, Cove Base Glue Lab ID-Version 1: 17611095-1

Sample Layers	Asbestos Content
Tan Glue	ND
Sample Composite Homogeneity:	Good

Location: 11, Cove Base Glue	Lab ID-Version‡: 17611096-1
Sample Layers	Asbestos Content
Tan Glue	ND
Sample Composite Homogeneity:	Good

Location: 12 Cove Base Glue

Location: 12, cove base Glac	
Sample Layers	Asbestos Content
Tan Glue	ND
Sample Composite Homogeneity:	Good

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

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Lab ID-Version : 17611100-1

Lab ID-Version 1: 17611101-1

EMLab ID: 3600724, Page 5 of 15

Client: MTGL, Inc. C/O: Mr. Carl Tucker Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange Bldg 9

Date of Sampling: 04-01-2024 Date of Receipt: 04-08-2024 Date of Report: 04-12-2024

ASBESTOS PLM REPORT

Location: 13, Carpet Adhesive

Location: 13, Carpet Adhesive	Lab ID-Version‡: 17611098-1
Sample Layers	Asbestos Content
Tan Adhesive	ND
Sample Composite Homogeneity:	Good

Location: 14, Carpet Adhesive	Lab ID-Version‡: 17611099-1
Sample Layers	Asbestos Content
Tan Adhesive	ND
Sample Composite Homogeneity:	Good

Location: 15, Carpet Adhesive

Sample Layers	Asbestos Content
Tan Adhesive	ND
Sample Composite Homogeneity:	Good

Location: 16. Ceramic Floor Tile w/Mortar

	•
Sample Layers	Asbestos Content
White Mortar	ND
Tan Ceramic Tile	ND
Sample Composite Homogeneity:	Moderate

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

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Lab ID-Version : 17611102-1

Lab ID-Version : 17611104-1

Lab ID-Version : 17611105-1

EMLab ID: 3600724, Page 6 of 15

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

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Date of Sampling: 04-01-2024 Date of Receipt: 04-08-2024 Date of Report: 04-12-2024

ASBESTOS PLM REPORT

Location: 17, Ceramic Floor Tile w/Mortar

Sample Layers	Asbestos Content
White Mortar	ND
Tan Ceramic Tile	ND
Sample Composite Homogeneity: Moderate	

Location: 18. Ceramic Floor Tile w/Mortar

Location: 18, Ceramic Floor Tile w/Mortar	Lab ID-Version‡: 17611103-1
Sample Layers	Asbestos Content
White Mortar	ND
Tan Ceramic Tile	ND
Sample Composite Homogenei	ty: Moderate

Location: 19. Ceramic Wall Tile w/Mortar

Sample Layers	Asbestos Content
Gray Mortar	ND
White Grout	ND
Beige Ceramic Tile	ND
Sample Composite Homogeneity: Poor	

Location: 20, Ceramic Wall Tile w/Mortar

Sample Layers	Asbestos Content
Gray Mortar	ND
White Grout	ND
Green Ceramic Tile	ND
Sample Composite Homogeneity: Poor	

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

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Lab ID-Version‡: 17611106-1

Lab ID-Version†: 17611108-1

Lab ID-Version †: 17611109-1

EMLab ID: 3600724, Page 7 of 15

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange Bldg 9

Date of Sampling: 04-01-2024 Date of Receipt: 04-08-2024 Date of Report: 04-12-2024

ASBESTOS PLM REPORT

Location: 21, Ceramic Wall Tile w/Mortar

Sample Layers	Asbestos Content
Gray Mortar	ND
White Grout	ND
Green Ceramic Tile	ND
Sample Composite Homogeneity: Poor	

Location: 22, Wall Plaster	Lab ID-Version‡: 17611107-1
Sample Layers	Asbestos Content
Gray Plaster	ND
Beige Skim Coat	ND
Beige Paint	ND
Sample Composite Homogeneity:	Moderate

Location: 23. Wall Plaster

Location, 25, Wan I laster	
Sample Layers	Asbestos Content
Gray Plaster	ND
Beige Skim Coat	ND
Beige Paint	ND
Sample Composite Homogeneity:	Moderate

Location: 24 Wall Plactor

Location: 24, Wall Flaster	Eur 15 Version ₄ . 17011107 1
Sample Layers	Asbestos Content
Gray Plaster	ND
Beige Skim Coat	ND
Beige Paint	ND
Sample Composite Homogeneity: Moderate	

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

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Lab ID-Version : 17611112-1

Lab ID-Version‡: 17611113-1

EMLab ID: 3600724, Page 8 of 15

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

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Date of Sampling: 04-01-2024 Date of Receipt: 04-08-2024 Date of Report: 04-12-2024

ASBESTOS PLM REPORT

Location: 25, Ceramic Floor Tile w/Mortar	Lab ID-Version‡: 17611110-1
Sample Layers	Asbestos Content
Gray Mortar	ND
Green Ceramic Tile	ND
Sample Composite Homogeneity: Moderate	

Location: 26. Ceramic Floor Tile w/Mortar

Location: 26, Ceramic Floor Tile w/Mortar	Lab ID-Version‡: 17611111-1
Sample Layers	Asbestos Content
Green Ceramic Tile	ND
Sample Composite Homogeneity:	Good

Location: 27. Ceramic Floor Tile w/Mortar

Sample Layers	Asbestos Content
Green Ceramic Tile	ND
Sample Composite Homogeneity:	Good

Location: 28. Ceiling Tile w/Adhesive

Sample Layers	Asbestos Content
Brown Adhesive	ND
Gray Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content: 40% Cellulose 40% Glass Fibers	
Sample Composite Homogeneity:	Moderate

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

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Lab ID-Version †: 17611114-1

Lab ID-Version 1: 17611115-1

EMLab ID: 3600724, Page 9 of 15

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange Bldg 9

Date of Sampling: 04-01-2024 Date of Receipt: 04-08-2024 Date of Report: 04-12-2024

ASBESTOS PLM REPORT

Location: 29. Ceiling Tile w/Adhesive

Location: 25, Cening The Wildingsive	2.00 12 1010114. 1701111111
Sample Layers	Asbestos Content
Brown Adhesive	ND
Gray Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	40% Cellulose
	40% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 30, Ceiling Tile w/Adhesive

	•
Sample Layers	Asbestos Content
Gray Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	
	40% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 31. Concrete Sidewalk

Location: 31, Concrete Sidewalk	Lab ID-Version‡: 17611116-1
Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 32, Concrete Sidewalk	Lab ID-Version‡: 17611117-1
Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Lab ID-Version : 17611120-1

Lab ID-Version*: 17611121-1

Client: MTGL, Inc. C/O: Mr. Carl Tucker Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange Bldg 9

Date of Sampling: 04-01-2024 Date of Receipt: 04-08-2024 Date of Report: 04-12-2024

ASBESTOS PLM REPORT

Location: 33, Concrete Sidewalk

Location: 33, Concrete Sidewalk	Lab ID-Version‡: 17611118-1
Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity: Good	

Location: 34, Concrete Floor	Lab ID-Version‡: 17611119-1
Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 35, Concrete Floor

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 36 Concrete Floor

Location: 50, Concrete 11001	240 12 (01010141 17011121 1
Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

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9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange Bldg 9

Date of Sampling: 04-01-2024 Date of Receipt: 04-08-2024 Date of Report: 04-12-2024

ASBESTOS PLM REPORT

Location: 37, Vinyl Tile Lab ID-Version : 17611122-1

Sample Layers	Asbestos Content
Semi-Transparent Adhesive	ND
Gray Sheet Flooring	ND
Sample Composite Homogeneity: Moderate	

Location: 38, Vinvl Tile Lab ID-Version 1: 17611123-1

Sample Layers	Asbestos Content
Semi-Transparent Adhesive	ND
Gray Sheet Flooring	ND
Sample Composite Homogeneity: Moderate	

Location: 39, Vinvl Tile Lab ID-Version 1: 17611124-1

Sample Layers	Asbestos Content
Semi-Transparent Adhesive	ND
Gray Sheet Flooring	ND
Sample Composite Homogeneity:	Moderate

Location: 40, Fissured Ceiling Tile Lab ID-Version 1: 17611125-1

Sample Layers	Asbestos Content
Brown Mastic	ND
Gray Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	60% Cellulose
	20% Glass Fibers
Sample Composite Homogeneity:	Moderate

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Lab ID-Version‡: 17611126-1

Lab ID-Version 1: 17611128-1

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange Bldg 9

Date of Sampling: 04-01-2024 Date of Receipt: 04-08-2024 Date of Report: 04-12-2024

ASBESTOS PLM REPORT

Location: 41, Fissured Ceiling Tile

	•
Sample Layers	Asbestos Content
Gray Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	60% Cellulose
	20% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 42. Fissured Ceiling Tile

Location: 42, Fissured Ceiling Tile	Lab ID-Version‡: 17611127-1
Sample Layers	Asbestos Content
Gray Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	60% Cellulose
	20% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 43. Unfinished Drywall

	•
Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Good

Location: 44, Unfinished Drywall	Lab ID-Version‡: 17611129-1
Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Good

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(800) 651-4802 www.eurofinsus.com/Built

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange Bldg 9

Date of Sampling: 04-01-2024 Date of Receipt: 04-08-2024 Date of Report: 04-12-2024

ASBESTOS PLM REPORT

Location: 45, Unfinished Drywall

Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Good

Location: 46, Brick and Mortar

Lab ID-Version 1: 17611131-1

Lab ID-Version : 17611130-1

Sample Layers	Asbestos Content
Gray Mortar	ND
Red Brick	ND
Sample Composite Homogeneity:	Moderate

Location: 47, Brick and Mortar

Lab ID-Version :: 17611132-1

Sample Layers	Asbestos Content
Gray Mortar	ND
Red Brick	ND
Sample Composite Homogeneity:	Moderate

Location: 48, Brick and Mortar

Lab ID-Version‡: 17611133-1

Sample Layers	Asbestos Content
Gray Mortar	ND
Red Brick	ND
Sample Composite Homogeneity:	Moderate

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9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Lab ID-Version 1: 17611135-1

Lab ID-Version : 17611137-1

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange Bldg 9

Date of Sampling: 04-01-2024 Date of Receipt: 04-08-2024 Date of Report: 04-12-2024

ASBESTOS PLM REPORT

Location: 49, HVAC Caulk Lab ID-Version‡: 17611134-1

Sample Layers	Asbestos Content
Black Caulk	ND
Composite Non-Asbestos Content:	2% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 50. HVAC Caulk

200000110001100000011	· · · · · · · · · · · · · · · · · · ·
Sample Layers	Asbestos Content
Black Caulk	ND
Composite Non-Asbestos Content:	2% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 51, HVAC Caulk Lab ID-Version‡: 17611136-1

Sample Layers	Asbestos Content
Black Caulk	ND
Composite Non-Asbestos Content:	2% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 52, Window Putty

Sample Layers	Asbestos Content
Green Window Putty	ND
Sample Composite Homogeneity:	Good

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Lab ID-Version 1: 17611139-1

Client: MTGL, Inc. C/O: Mr. Carl Tucker Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange Bldg 9

Date of Sampling: 04-01-2024 Date of Receipt: 04-08-2024 Date of Report: 04-12-2024

ASBESTOS PLM REPORT

Location: 53, Window Putty Lab ID-Version‡: 17611138-1

Sample Layers	Asbestos Content
Green Window Putty	ND
Sample Composite Homogeneity:	Good

Location: 54. Window Putty

Sample Layers	Asbestos Content
Green Window Putty	ND
Sample Composite Homogeneity:	Good

Location: 55, Pipe Elbow Ins w/Wrap	Lab ID-Version‡: 17611140-1
Sample Layers	Asbestos Content
Gray Pipe Insulation	15% Chrysotile 5% Amosite
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Comments: Samples 56-57 were not analyzed due to prior positive series.

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CHAIN OF CUSTODY : eurof	fins	irofi	eure		Y	STOD	CU	OF	CHAIN	(
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www.eurofinsus.com/Built

East: (000) 971 1994

Buill Environment Testing

WEATHER Fog Rain Snow Wind Clear None Light
Moderate

Non-Culturable

East: (866) 871-1984 Central: (800) 651-4 West: (866) 888-665	802		யு Moderate Heavy			Spon		ape, b. Buli	Bipi Sw	C (03	6007	24			
	CONTACT	INFORMATIO	N			3 1				(eria)			100	3		
Contact: CA	TGLIERC. AS PLTUCKU S 1-454-7851	ddress: 770 pecial Instructio Bldg	tz Arjons DR q * 1st f				(a)	-	ID + Asp. spp.)	p spp.) Air and Surface Bacteria		acuas	CONT. HOOK THE CO.	ar count (Nicon at		
	PROJECT INFORMATION			TIME CODES - (TAT)		(Qualitative)	еха	o.	+ As		Se/Ab	l d	D L		
Description: 3:	unir Coust: - Oc Juvenile 31 The City of Oronge 2868 Santaing 2868 Santaing Sampled E24-061.100 By: DB	-1-2450	D - Standard (Default) - Next Business Day - Same Business Day - Weekend/Holiday/ASA	Rushes received or on weekend considered rec next business d alert us in adv weekend analy	ds, will be beived the lay. Please vance of	9-13	ogical particles rescopic Exam	ive spore count direct examination	1-Media Surface Fungi (Genus	Culturable Air Fungi (Genus ID + Asp. spp. Gram Stain and Counts (Culturable Air and	a culture	Total Coliform, E.adi (Presenc QuantiTray-Sewage Screen OTHER (niesse specify tost)		m Air Bulk). Flame AA	PCR (please specify test) Allergens (please specify test)
SAMPLE ID	DESCRIPTION	Tyron	TAT Volume/Area (as applicable)	NOTES (Time of day, Temp	, RH, etc.)		Direct Mic	Oust Charac	1-Media	Culturable Air Gram Stain an	yeuosbe7	Total Col QuantiTri OTHER		Asbestos	Lead (Pb) -	PCR (ple
23456789012345	Textured drywall Concrete Block cove base glue Carpet Adhistics		4													
	SAMPLE TYPE CODES			RELINQUISHED BY DATE & TIME		RECEIVED BY							DATE & TIME			
BC - BioCassette" A1S - Andersen SAS - Surface Air S NP - Non-potable W	ST - Spore Trap SW - Swab Sampler B - Bulk SO - Soil	O - Other;	Dala Bee	seemy 419	sleg				_	2				to	80	04

CHAIN OF CUSTODY 🔆 eurofins

www.eurofinsus.com/Built

East: (866) 871-1984

Built Environment Testing

Fog Rain Snow Wind Clear WEATHER None LEVEL Light Moderate

REQ Non-Culturable BioCass Swab, V

		CONTAC	TINFORMATION						1		acter			7400			
mpany:	MTGL	IInc.	Address: 7742 / Special Instructions	Arjons DR.	San Diogo	192126				0	Surface Ba			NIOSH 7400			
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oject ID: oject scription:	Vanir C	oust - OCTuvenile Le City of orange	Blad4 ND-Nex	andard (Default) 1 Business Day	or on week considered	kends, will be received the ss day. Please	10 minutes	Exam (Qual	£ .	ungi (Gerik	able Air Fungi (Genus ID + Asp. spp. Stain and Counts (Culturable Air and	nella culture	QuantiTray-Sewage Screen OTHER: [please specify tast)	Asbestos in Air - PCM Airborne	PLM	e AA cify test)	
oject c Code:	72808	Sampled A		ne Business Day ekend/Holiday/ASAP	alert us in	advance of nalysis needs.	ap Analys	одісаї ра	titative spore co	Surface	e Air Fun	Legionella culture	ay-Sewage (please spe	s in Air -	s Bulk - P	Lead (Pb) - Flame AA PCR (please specify test)	s (please
SAMPLE	5DR-24-0	DESCRIPTION	Sample TAT Type (Above)	Total Volume/Area (as applicable)	NOT (Time of day, T		Spore Tra	Other bio	Quantitat Dust Cha		Culturable Gram Staff	(legione)	Quantitray-	Asbestor	Asbesto	PCR (ple	Allergens
18 20 21 22	ο (2 3	amic Wall tile w/n Aplaster L	u.rtar		4"x +	()											
21	ام 7	ramic floor tile h			1"x1"	pinhole											
2	1	ling tile w/Adh	=671~		1 X1	pinnoq											
3	0		7	RELINQUISHE	D BY	DATE & TIME	i	-	F	RECE	IVED	BY			DAT		
BC - BioCa		CP - Contact Plate T - Tape ST - Spore Trap SW - Swab	o - Other:	Dala Bee	ry	45/24	T		3	C	2	_	_	1	11	8	04

CHAIN OF CUST(www.eurofinsus.com/Bu East: (866) 871-1984 Central: (800) 651-4802 West: (866) 888-6653	ODY 💸 eurofins iii	Environmen	it Testin	WEATHER None Light Moderate Heavy	Fog Rain S	now Wind Clear	Non Spore Trap	T	Iturak Tape wab, i		- - - - - - - - - - - - - - - - - - -	003	360	07	24				3
	CONTAC	TINFORMAT	ION									(steria)				(00)	d		
Contact: CARLT Priorie: 619-41	TUKU TUKU SY-7851 PROJECT INFORMATION	Address: 77 Special Instruc	742 A	TURN AROUND T			mont	ficela	exam		7 + Asp. spp.)	able Air and Surface Backerla	Absence)			iber Count (NIOSH 74			
Project ID: Vanir Project Description: 331 Project Zip Code: 9286	Coust - Oc Twenile The City of crange	1-24	ND - Next SD - Sam	ndard (Default)	Rushes reco or on wee considered next busined alert us in	eved after 2pm kends, will be d received the ess day. Please n advance of unalysis needs.	1 13	Digital particles supplier for	dive spore count direct ex	Characterization	Surface Fung) (Genus	rung (cerus io nd Counts (Cultur	Legionella culture Total Colforn, E.coli (Presence/Absence)	ray Sewage Screen	OTHER: (please specify test)	Asbestos in Air - PCM Airborne Fibor	Asbestos Bulk - PLM	Load (Pb) - Flame An PCR (please specify test)	Allergens (please specify test)
SAMPLE ID	DESCRIPTION	Sample Type (Below)	TAT (Above)	Total Volume/Area (as applicable)	NOT	TES 'emp, RH, etc.)	Spore Tr	Officer bit	Quantitative	Dust Ch	1-Media	Gram Stain at	Legione	QuantiTray	OTHER	Asbesto	Asbesto	PCR (pl	Alterger
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	SAMPLE TYPE CODES	la ale	- 6	Saula Be			+	-		7)				1	1	8	124
BC - BioCassette ¹¹ A1S - Andersen SAS - Surface Air Sampl NP - Non-potable Water	CP - Contact Plate T - Tape ST - Spore Trap SW - Swab er B - Bulk SO - Soil P - Potable Water D - Dust	O - Other:		Donla B	rely	4/5/24										-(0	8	-c4

CHAIN OF CUSTODY 🔆 eurofins

www.eurofinsus.com/Built

East: (866) 871-1984

Built Environment Testing

Fog Rain Snow Wind Clear WEATHER None Light Moderate

REQUEST Non-Culturable BioCassette

entral: (800) 651-4802 Vest: (866) 888-6653				Heavy			Trap	Sv	vab, B	ulk	76.032	Cont	ta		-1		-	
(50. (500) 500 500	CON	ACT INFORMA	TION									cleria)			(00)			
ontact: CARL	-1, Inc. Tucker 54-7851			Arjous DR	.,San Diog	0/92/26		* -		- 11	Asp app.)	Air and Surface Back	ance)		r Count (NIOSH 7490)			
	PROJECT INFORMATION			TURN AROUND	TIME CODES - (TAT)		lative	ехаш	- 11:	+ Asp	able /	e/Abs		Fiber			
roject ID. Vani roject sescription: 331 roject ip Code: 9280	r Coust - OcTowen The City of Orong 68 Date/Time: 5 Sampled 94-061.10 By: DB	14-1-24	ND - Nex	andard (Default) it Business Day ne Business Day rekend/Holiday/ASA	or on wee considered next busine alert us in	eived after 2pm kends, will be d received the ess day. Please n advance of inalysis needs.	ap Analysis	Other biological particles - supplement	spore count	aracterization	Surface Fungi (Genus ID + Asp.	and Col	Legionella culture Total Coliform, E colt (Presence/Absence)	Quantifray-Sewage Screen OTHER: (please specify test)	s to Air : PCM Airborne	31.70	(Pb) - Flame AA	PCR (please specify test) Allergens (please specify test)
SAMPLE ID	DESCRIPTION	Sample Type (Below)	TAT (Above)	Total Volume/Area (as applicable)	NO		Spore Tr	Other biolo	Quantitative	Dust Cha	1-Media Si Cutturable	Gram St	Legionella Total Collifo	Quantific	Aspestos in Alt	Asbesto	Lead (P	PCR (pr
50	HVAC Caulk Window Putt Pipe Elbow Ins w																	
	SAMPLE TYPE CODES			RELINQUISH		DATE & TIME				RE	CEIV	ED B	Υ					TIME
BC - BioCassette A1S - Andersen SAS - Surface Air Sami	CP - Contact Plate T - Tape ST - Spore Trap SW - Sw pler B - Bulk SO - Soil	X-23	Ī	Darla 3c	ery Benj	4/5/24					(_	2			05	812



Report for:

Mr. Carl Tucker MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126

Eurofins EPK Built Environment Testing, LLC Project: Vanir Const. - OC Juvenile Hall; 331 The City of Orange B2, 5, 7, and 9 Regarding:

EMĹ ID: 3600732

Approved by:

Dates of Analysis: Asbestos PLM: 04-11-2024

Approved Signatory Carlos Rivadeneyra

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267) NVLAP Lab Code 500034-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

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(800) 651-4802 www.eurofinsus.com/Built

Date of Sampling: 04-02-2024 Date of Receipt: 04-08-2024 Date of Report: 04-11-2024

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B2, 5, 7, and 9

ASBESTOS PLM REPORT

Total Samples Submitted: 16 **Total Samples Analyzed:** 16 **Total Samples with Layer Asbestos Content > 1%:**

Lab ID-Version 1: 17610976-1

Lab ID-Version 1: 17610977-1

Lab ID-Version 1: 17610978-1

EMLab ID: 3600732, Page 2 of 6

Location: R-1, Silver Rolled Roofing Over Insulation - 7

Sample Layers	Asbestos Content
Black/White Roofing Material	ND
Black Roofing Felt 1	ND
Black Roofing Felt 2	ND
Black Roofing Felt 3	ND
Brown Fibrous Material	ND
Composite Non-Asbestos Content:	20% Glass Fibers 10% Cellulose
Sample Composite Homogeneity:	Poor

Location: R-2, Silver Rolled Roofing Over Insulation - 9

Sample Layers	Asbestos Content
Black/White Roofing Material	ND
Black Roofing Felt	ND
Black Roofing Tar and Felt	ND
Brown Fibrous Material	ND
Composite Non-Asbestos Content:	20% Glass Fibers 10% Cellulose
Sample Composite Homogeneity:	Poor

Location: R-3, Silver Rolled Roofing Over Insulation - 5

Sample Layers	Asbestos Content
Black/White Roofing Material	ND
Black Roofing Tar and Felt 1	ND
Black Roofing Tar and Felt 2	ND
Black Roofing Tar and Felt 3	ND
Brown Fibrous Material	ND
Composite Non-Asbestos Content:	20% Glass Fibers
	10% Cellulose
Sample Composite Homogeneity:	Poor

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(800) 651-4802 www.eurofinsus.com/Built

Lab ID-Version‡: 17610979-1

EMLab ID: 3600732, Page 3 of 6

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B2, 5, 7, and 9

Date of Sampling: 04-02-2024 Date of Receipt: 04-08-2024 Date of Report: 04-11-2024

ASBESTOS PLM REPORT

Location: R-4, Silver Rolled Roofing Over Insulation - 2

Sample Layers	Asbestos Content
Black/White Roofing Material	ND
Black Roofing Tar and Felt 1	ND
Black Roofing Tar and Felt 2	ND
Brown Fibrous Material	ND
Composite Non-Asbestos Content:	20% Glass Fibers 10% Cellulose
Sample Composite Homogeneity:	Poor

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Lab ID-Version‡: 17610980-1

Lab ID-Version 1: 17610981-1

EMLab ID: 3600732, Page 4 of 6

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B2, 5, 7, and 9

Date of Sampling: 04-02-2024 Date of Receipt: 04-08-2024 Date of Report: 04-11-2024

ASBESTOS PLM REPORT

Location: R-5, Silver Rolled Roofing Over Insulation - 2

Sample Layers	Asbestos Content
Black/White Roofing Material	ND
Black Roofing Tar and Felt 1	ND
Black Roofing Tar and Felt 2	ND
Black Roofing Tar and Felt 3	ND
Brown Fibrous Material	ND
Composite Non-Asbestos Content:	20% Glass Fibers
-	10% Cellulose
Sample Composite Homogeneity:	Poor

Location: R-6, Roof Mastic - 9

Sample Layers	Asbestos Content
Black Roofing Mastic	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: R-7, Roof Mastic - 7	Lab ID-Version‡: 17610982-1
Sample Layers	Asbestos Content
Black Roofing Mastic	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: R-8, Roof Mastic - 5	Lab ID-Version‡: 17610983-1
Sample Layers	Asbestos Content
Black Roofing Mastic	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

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Lab ID-Version 1: 17610986-1

Lab ID-Version : 17610987-1

EMLab ID: 3600732, Page 5 of 6

Client: MTGL, Inc. C/O: Mr. Carl Tucker Date of Sampling: 04-02-2024 Re: Vanir Const. - OC Juvenile Hall; 331 The City of Orange B2, 5, 7, and 9

Date of Receipt: 04-08-2024 Date of Report: 04-11-2024

ASBESTOS PLM REPORT

Location: R-9, Roof Mastic - 5 Lab ID-Version‡: 17610984-1

Sample Layers	Asbestos Content
Black Roofing Mastic	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: R-10. Roof Mastic - 2

Location: R-10, Roof Mastic - 2	Lab ID-Version‡: 17610985-1
Sample Layers	Asbestos Content
Black/White Roofing Mastic	ND
Composite Non-Asbestos Content:	10% Cellulose
-	10% Glass Fibers
Sample Composite Homogeneity	Moderate

Location: R-11, HVAC Caulk/Tape - 7

Sample Layers	Asbestos Content
Gray/White Caulk	ND
Brown/Black Non-Fibrous Material	ND
Sample Composite Homogeneity: Poor	

Location: R-12 HVAC Caulk/Tane - 5

Education: K 12, 11 vite Caulity rape 5	
Sample Layers	Asbestos Content
Gray/White Caulk	ND
Sample Composite Homogeneity	Moderate

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Lab ID-Version : 17610988-1

Lab ID-Version 1: 17610989-1

Lab ID-Version 1: 17610991-1

EMLab ID: 3600732, Page 6 of 6

Client: MTGL, Inc. C/O: Mr. Carl Tucker Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B2, 5, 7, and 9

Date of Sampling: 04-02-2024 Date of Receipt: 04-08-2024 Date of Report: 04-11-2024

ASBESTOS PLM REPORT

Location: R-13, HVAC Caulk/Tape - 2

Sample Layers	Asbestos Content
Gray/White Caulk	ND
Sample Composite Homogeneity: Moderate	

Location: R-14, Vinvl Cap Sheet - B2

Sample Layers	Asbestos Content
White Non-Fibrous Material	ND
Gray Fibrous Material	ND
Green Mastic	ND
Composite Non-Asbestos Content: 15% Synthetic Fibers	
Sample Composite Homogeneity:	Poor

Location: R-15, Vinvl Cap Sheet - B2

Location: R-15, Vinyl Cap Sheet - B2	Lab ID-Version‡: 17610990-1
Sample Layers	Asbestos Content
White Non-Fibrous Material	ND
White Fibrous Material	ND
Composite Non-Asbestos Content:	15% Synthetic Fibers
Sample Composite Homogeneity:	Poor

Location: R-16, Vinvl Cap Sheet - B2

Location: It 10, vinys cup sheet 122	
Sample Layers	Asbestos Content
White Non-Fibrous Material	ND
White Fibrous Material	ND
Green Mastic	ND
Black Mastic	4% Chrysotile
Composite Non-Asbestos Content:	15% Synthetic Fibers
Sample Composite Homogeneity:	Poor

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

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SAS - Surface Air Sampler	B - Bulk	SO - Soil			/														
NP - Non-potable Water	P - Potable Water	D - Dust																	

United States Department of Commerce National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 500034-0

Eurofins EMLab P&K

San Diego, CA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2024-01-01 through 2024-12-31

Effective Dates



For the National Voluntary Laboratory Accreditation Program



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Eurofins EMLab P&K

9445 Farnham St #103 San Diego, CA 92123 Quynh Nguyen Phone: 800-651-4802

Email: quynh.nguyen@et.eurofinsus.com https://www.eurofinsus.com/environment-testing/

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 500034-0

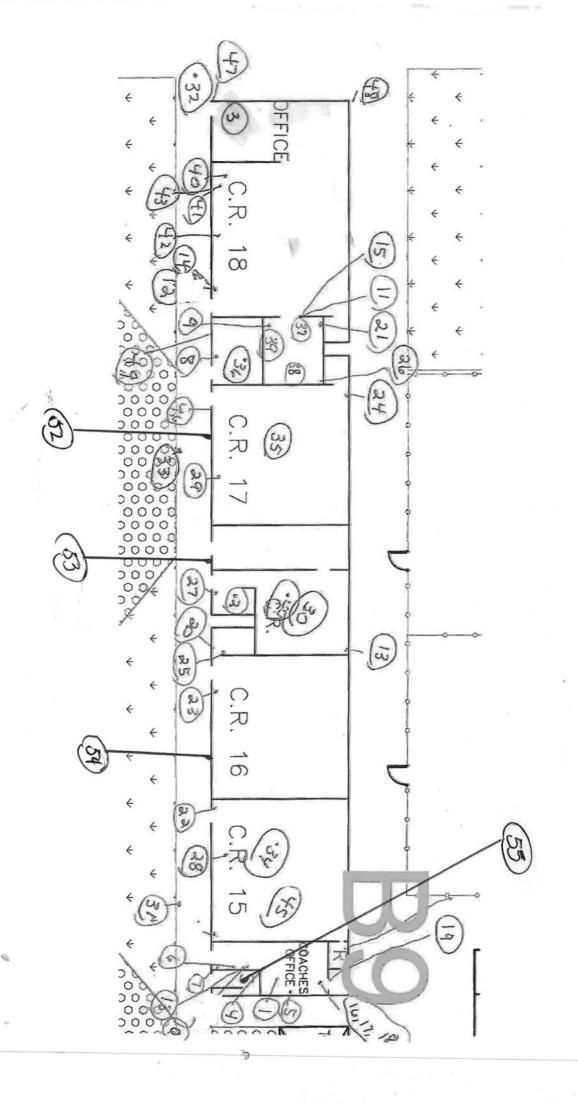
Bulk Asbestos Analysis

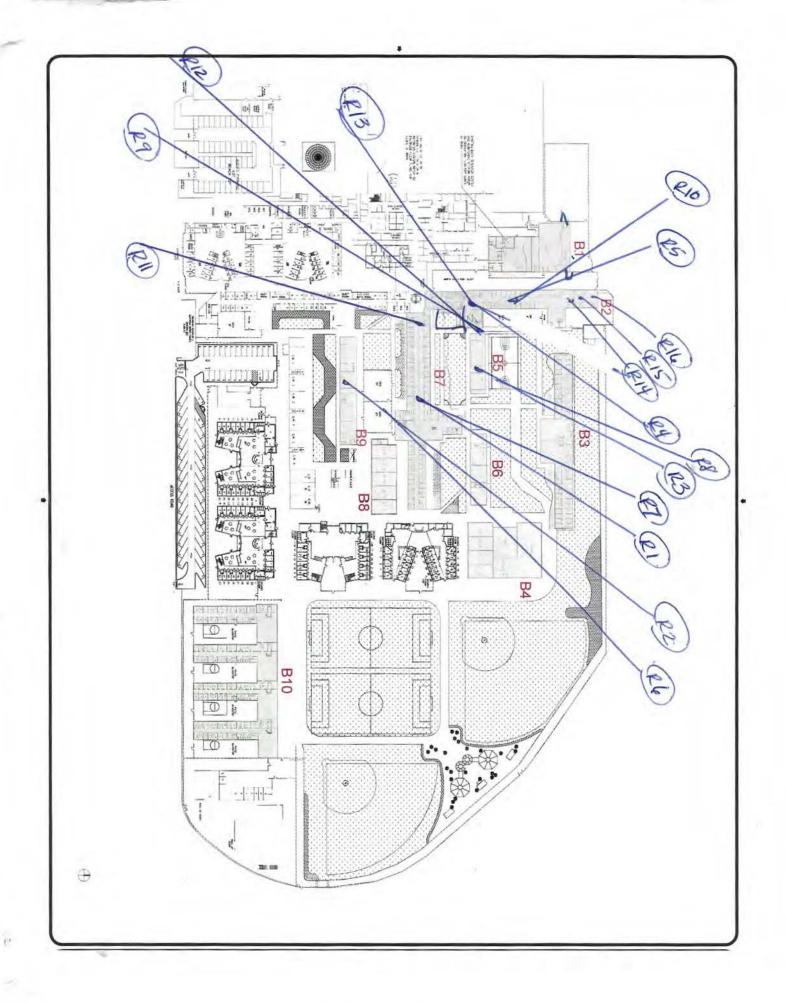
<u>Code</u>	<u>Description</u>
18/A01	EPA 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

For the National Voluntary Laboratory Accreditation Program

APPENDIX 2

SAMPLE LOCATION MAP (NOT TO SCALE)

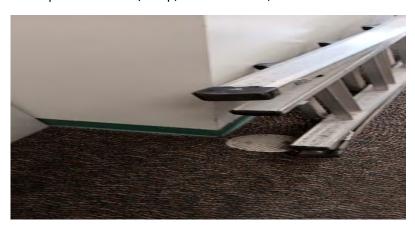




APPENDIX 3 PHOTO DOCUMENTATION



1. Pipe insulation w/wrap, Brick & mortar, and Concrete block.



2. Textured drywall, Cove base, and Carpet.



3. Ceramic floor tile.



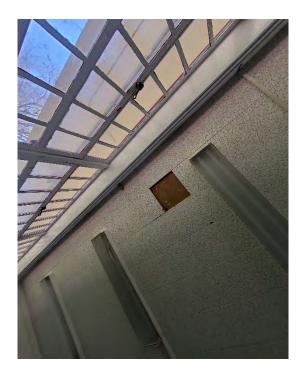
4. Concrete floor and sidewalk.



5. Ceiling tile and Unfinished drywall.



6. Pinhole ceiling tile.



7. View of ceiling tile and unfinished drywall.



8. Ceramic wall and floor tile.



9. HVAC Caulking



10. View of Exterior



11. View of Classroom.



12. View of Classroom.



13. View of bathroom.

APPENDIX 4 INSPECTOR CERTIFICATIONS

California Certified Asbestos Consultant (CAC)

Card Holder: <u>Michelle Ehresman</u>

Certification Number: <u>14-5323</u> Exp.: <u>11/19/2024</u>

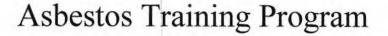
Current Employer: MTGL, Inc.

Supporting Certifications:

AHERA Contractor/Supervisor Refresher Certification
 AHERA Building Inspector Refresher Certification
 AHERA Management Planner Refresher Certification
 AHERA Project Designer Refresher Certification
 Exp. 7/27/2024
 Exp. 7/27/2024
 Exp. 8/16/2024



MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126 858-537-3999



This is to certify

Michelle Ehresman 1656

Has successfully completed 8 hours of formal training required by section 206 of TSCA II entitled

Contractor/Supervisor Refresher

Presented By **Environmental Compliance Training** PO BOX 16555 San Diego, CA. 92176-6555

(858) 558-7465

Director:

Walter T. Amenta, CIH, Approval Number CA-029-04

Class Dates:

06-24-2023

Exam Date:

n/a

Expiration Date: 06-24-2024

Certification Number: 0623ABCA167303

Certificate Of Completion

Asbestos Building Inspector Refresher Course

DOSH #: CA-015-06

Michelle Ehresman

ABIR0727230010N35227

David Wallach

Principal Instructor

7/27/2023

Course Start Date

7/27/2023

Course End Date

Michael W. Horner

Training Director

7/27/2023 Exam Date 7/27/2024

Expiration Date

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



NATEC International, Inc.

National Association of Training and Environmental Consulting



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Important Industry Contacts

CAL-OSHA:

Ph# (916) 574-2993

(916) 483-0572 Fax Notification Web: www.dir.ca.gov or calosha.com

CDPH/CLPPB:Ph# (510) 620-5600

Web: www.cdph.ca.gov/programs/CLPPB

SCAQMD:

Ph# (909) 396-3739

Fax#(909) 396-3342

BAAOMD:

Ph# (415) 749-4762

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National Association of Training and Environmental Consulting

This Card Acknowledges That Michelle Ehresman

Holds Training Certification For Asbestos Building Inspector Refresher Course

Expiration: 7/27/2024

ABIR0727230010N35227

Michael W. Horner Training Director

Certificate Of Completion

Asbestos Project Designer Refresher Course

DOSH #:CA-015-10

Michelle Ehresman

APDR0816230004N35415

Norm Kramer

Principal Instructor

8/16/2023 Course Start Date 8/16/2023

Course End Date

8/16/2023

Exam Date

Michael W. Horner

Training Director

8/16/2024

Expiration Date

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



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*Note: Card is not suitable substitute for certificate and is not accepted by SCAQMD as proof of
certification
This Card Askinguidades That

This Card Acknowledges That Michelle Ehresman

Holds Training Certification For Asbestos Project Designer Refresher Course

Expiration: 8/16/2024

Training Date 8/16/2023 APDR0816230004N35415

Michael W. Horner Training Director

Certificate Of Completion

Asbestos Management Planner Refresher Course

DOSH #:CA-015-08

Michelle Ehresman

AMPR0727230007N35357

David Wallach

Principal Instructor

7/27/2023

Course Start Date

7/27/2023

Course End Date

7/27/2023 Exam Date

Training Director

Michael W. Horner

7/27/2024 **Expiration Date**

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



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CDPH/CLPPB:Ph# (510) 620-5600

Web: www.cdph.ca.gov/programs/CLPPB

SCAQMD:

Ph# (909) 396-3739 Fax#(909) 396-3342

BAAQMD:

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National Association of Training and Environmental Consulting

This Card Acknowledges That Michelle Ehresman

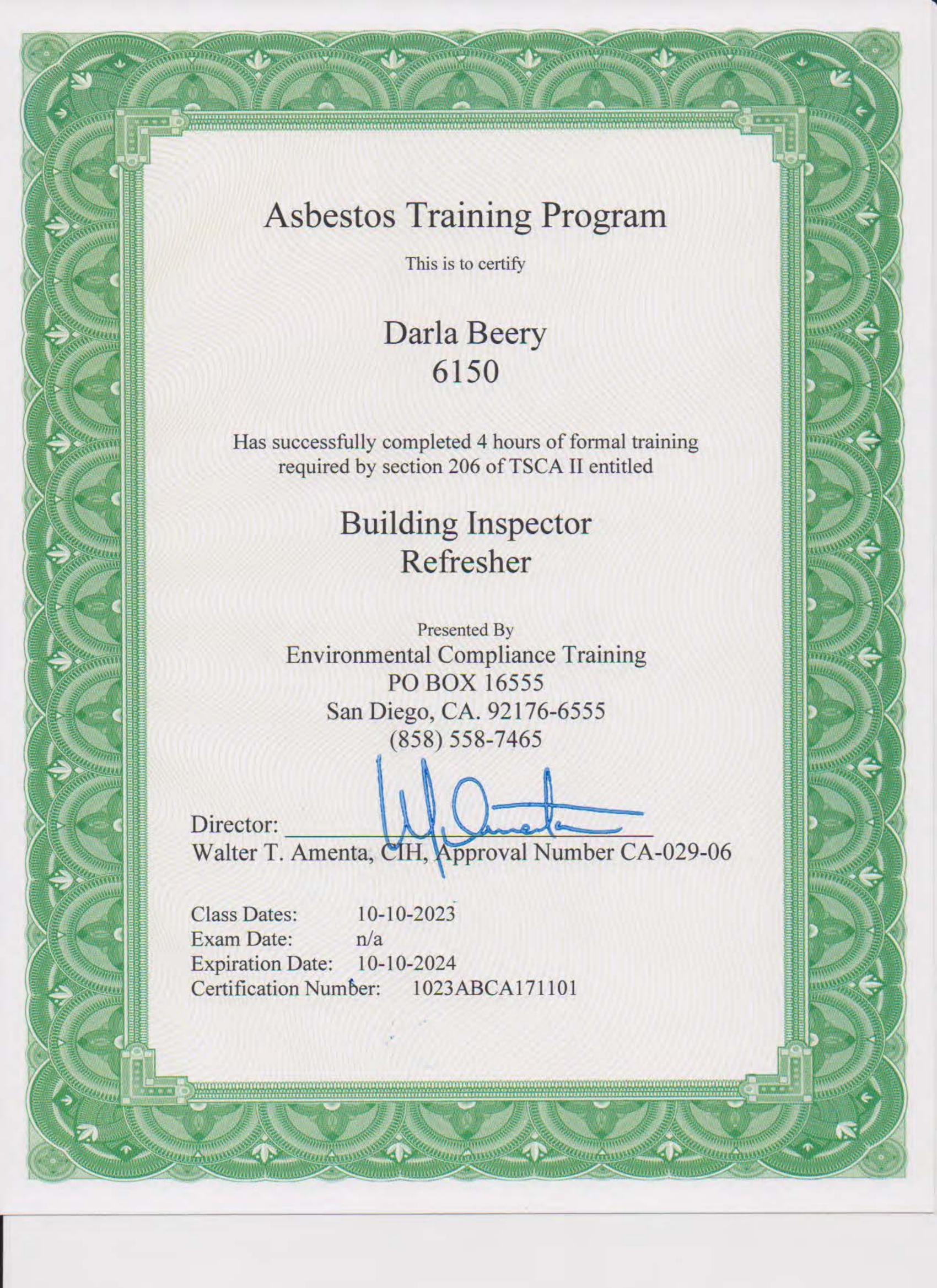
Holds Training Certification For Asbestos Management Planner Refresher Course

Expiration: 7/27/2024

7/27/2023 Training Date AMPR0727230007N35357 Certificate No.

Michael W. Homer Training Director

Darla Beery AHERA Building Inspector Certification



LEAD-BASED PAINT INSPECTION REPORT

Juvenile Hall-Building 9-Classrooms 15-18 331 The City Drive, S Orange, California 92868

Prepared for:

Vanir Construction 4540 Duckhorn Drive, Suite 300 Sacramento, California 95834

Prepared by:

MTGL, Inc. 7742 Arjons Drive San Diego, California 92126 858-537-3999

Project Number:

SDPE-24-061.1CT

Michelle Ehresman, CAC, LIA/LPM, ICRA Certification Number: CDPH# 0458/0459

Report Issuance Date: April 26, 2024

TABLE OF CONTENTS

SECTION

INTRODUCTION	1
General Information	
Authorization	
Performance	
WARRANTY	2
METHODOLOGY	3
General References	
Lead Sampling Procedures	
Performance Characteristic Sheets	
SUMMARY of FINDINGS	4
Lead-Based Paint Summary	
HAZARD CONTROL AND ABATEMENT OPTIONS &LEAD SAFE WORK PRACTICES	5
LEAD BASED PAINT DISCLOSURE	6
APPENDICES	7
Appendix 1 –XRF Data Report and Performance Characteristic Sheet	
Appendix 2 – Site Drawing	
Appendix 3 – Glossary	
Appendix 4 – Inspector Certification	
Appendix 5 – CDPH 8552 Form	
Appendix 6 – Renovate Right	

GENERAL INFORMATION

MTGL was retained by Vanir Construction to conduct a lead-based paint inspection at the subject property located at 331 The City Drive in Orange, California 92868. All inspections were in accordance with the guidelines set forth in the U.S. Department of Housing and Urban Development. This document is prepared for the sole use of Vanir Construction and/or any Regulatory or Governmental agencies that may directly become involved with this project.

MTGL's scope of work was limited to the following Client specified locations at the property:

- Building 9 (Single story, wood frame with brick and concrete on a concrete slab.)
 - o Classrooms 15, 16, 17, 18

PURPOSE

The purpose of this inspection is to identify and assess painted components at the subject location above specified regulatory action levels within the Client specified scope of work.

AUTHORIZATION

Authorization to perform the survey was given by Mr. Scott Battles with a notice to proceed via proposal SDPE-24-061.1CT.

PERFORMANCE

All visual inspections and component testing was performed in accordance with Federal, State and local requirements. The inspection was performed by Michelle Ehresman, a California Certified Lead Inspector/Assessor on April 1, 2024.

LEAD-BASED PAINT SURVEY

MTGL, Inc. warrants that the findings contained herein have been prepared with the level of care and skill exercised by experienced and knowledgeable environmental consultants who are appropriately licensed or otherwise trained to perform lead-based paint assessments pursuant to the scope of work required on this project.

MTGL, Inc. warrants that the findings contained herein have been prepared in general accordance with accepted professional practices as applied by similar professionals in the community at the time of its preparation. Changes in the state of the art or in applicable regulations cannot be anticipated and have not been addressed in this report.

The survey included the inspection of accessible materials only. MTGL did not inspect or sample inaccessible areas such as behind walls or within ductwork and did not dismantle any part of the structure to survey inaccessible areas. For the purpose of this warranty, inaccessible is defined as areas of the building that could not be tested (sampled) without destruction of the structure or a portion of the structure. Inaccessible materials that are visible to MTGL inspectors shall be assumed to be lead-based paint coated.

It is the owner's legal obligation to disclose the inspection results to tenants and/or purchasers before obligation under 24 CFR part 35 and 40 CFR part 745 (published in the Federal Register, Volume 61, Number 45, March 6, 1996, starting on P. 9064; copies of the regulations and related materials can be obtained from the National Lead Information Center Clearinghouse, (1-800-424-LEAD)

GENERAL REFERENCES

LEAD-BASED PAINT

Lead-based paint testing was conducted in accordance with the Title 17, California Code of Regulations, Division 1, Chapter 8, Accreditation, Certification and Work Practices in Lead-Related Construction, Section 36000 and the United States Department of Housing and Urban Developments *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, Chapter 7 Lead-Based Paint Inspections*, as published in June 1995 and revised in 1997.

The State of California, HUD and the EPA currently define lead-based paint as paints or other surface coatings, which contain lead equal to or greater than 1.0 milligrams of lead per square centimeter of surface area (mg/cm²), or equal to or greater than 0.5% by weight.

Lead-based paint testing was conducted using portable x-ray fluorescence (XRF) spectrum analyzer, Model Niton XLP 300, Manufactured by Niton, Inc. The Niton XLP 300 is calibrated to measure the K-shell x-ray emissions of lead. The K-shell is normally used for paint analysis because it measures lead in all layers of paint films, including the lower layers where higher concentrations of lead are usually found. An initial calibration and ending calibration is validated each day with a laminated Lead Paint Standards testing card which is provided by the manufacturer. The card is a direct comparison to the paint standard to NIST kit SRM2579a with a spectrum analyzer. If an instrument does not maintain consistent calibrations after following the manufacturer's recommendation, the unit is removed from the site and sent back to the manufacturer for service.

In the instance where paint chip samples are collected, sample collections are conducted by the requirements of the American Society of Testing and Materials standard E 1729, Standard Practice for Field Collection of Dried Paint Samples for Lead Determination by Atomic Spectrometry Techniques and HUD Guidelines.

Performance Characteristic Sheet (PCS)

Performance Characteristic Sheets for most XRF models can be found on the U.S. Department of Housing and Urban Developments Office of Healthy Homes and Lead Hazard Control website, specifically HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.(http://www.hud.gov/offices/lead/lbp/hudguidelines/index.cfm).Operating specification and procedures for the XRF used for this survey can be downloaded at the website above. PCS's can also be obtained by calling toll free to the National Lead Information Clearinghouse, at 800-424-LEAD. Persons with hearing or speech impediments may access the above number via TTY by calling the Federal Information Relay Service at 800-887-8339, toll free.

GENERAL SUMMARY

Lead-Based Paint Inspection Results

The purpose of the lead-based paint survey was to evaluate the referenced facility's painted components that may contain lead-based paint. Suspect components identified during the survey included but not limited to the following:

- Interior: Door and Window Components, Wall, Floor and Ceilings
- Exterior: Wall, Windows and Doors

The following is a summary of lead based painted components identified that contain lead greater than 1.0 mg/cm² or greater * (Please see attachment I for a detail report of findings.)

- No lead-based paint was identified in the components tested.
- Intact lead containing (<1.0 mg/cm2) green ceramic wall, base tile was identified in the in all bathrooms
- One deteriorated lead containing (<1.0 mg/cm2) porcelain sink was identified in the electrical room, 104.
- Lead containing (<1.0 mg/cm2) painted entry door/frames were identified.

*MTGL, Inc. is not responsible for actual quantity of the material(s). MTGL recommends bidding contractors to calculate quantities for estimated abatement costs. When evaluating this report, it is assumed that according to Chapter 7 HUD guidelines, that if one testing combination (i.e. window, door) is positive for lead in an interior or exterior room equivalent, that all other similar testing combinations in those areas are assumed to be positive.

When evaluating this report, it is assumed that according to Chapter 7 HUD guidelines, that if one testing combination (i.e. window, door) is positive for lead in an interior or exterior room equivalent, that all other similar testing combinations in those areas are assumed to be positive.

Current EPA and Cal/EPA regulations do not require lead-based paint to be removed prior to demolition, unless found to be loose and peeling. Provided that paints are securely adhered to the substrates, deposal of the debris can be handled in California as non-hazardous and non-RCRA waste, pending characterization of the waste.

Loose and peeling paints or other wastes exceeding the Total Threshold Level Concentration (TTLC) of 1,000 ppm ($\mu g/g$) would be required to be disposed of as non-RCRA hazardous waste. However, if the leachable lead contents of the wasted exceed the Soluble Threshold Level Concentrations (STLC) of 5 mg/liter, the wastes must be disposed of as RCRA waste.

Several government agencies have definitions for what amount of lead constitutes paint to be considered "lead-based". The Department of Housing and Urban Development (HUD) has designated the amount to be 1.0 mg/cm²·0.5% by weight or 5000 ppm (parts per million). The HUD regulations are related to potential hazards in the home environment and not to construction activities. The amount designated for high contact play areas is 400 ppm.

Lead Safe Work Practice Requirements for Maintenance, Renovation or Remodeling

EPA's RRP Rule requires anyone (remodeling, renovation and painting contractors and most other trades) who works in pre-1978 housing for compensation and who might disturb painted surfaces to become an EPA Certified Renovator by taking an 8-hour RRP "Lead Safe Work Practices" class from an EPA accredited training provider. The initial certification is good for five (5) years. To "renew" contractors must take a 4-hour RRP Refresher class before their initial certification expires. The RRP rule applies to anyone who works for compensation in pre-1978 housing and/or child-occupied facilities who might disturb painted surfaces, including:

- General contractors
- Demolition workers
- Remodeling contractors
- Maintenance workers in multi-family housing
- Painters, plumbers and most specialty trades.

The RRP rule covers a lot of jobs: renovation, remodeling, painting, window replacement, plumbing, electrical work, heating & air-conditioning, demolition, plus work performed by trades like carpenters, electricians and handymen. The rule also applies to persons working for rental property owners, schools, and day care providers. And, it applies to non-profits and governmental agencies. The RRP Rule requires that "Lead Safe Work Practices" be used when disturbing more than 6 square feet per room or 20 square feet outside.

It shall be noted that California's lead-based paint regulations cover ALL pre-78 structures that have not been tested - not just Target Housing and Child-Occupied Facilities. (Title 17, CCR, Div 1, Ch 8). Since 2003, California law (Title 17) has required that "Lead Safe Work Practices" be used in ALL pre-1978 structures when disturbing any amount of known or "presumed" lead-based paint. Contractors may have taken additional training to meet State of California requirements for Lead-Related Construction and obtain the required California Department of Public Health-Lead Related Construction Certifications for permanent abatement. This certification supplements but does not replace the EPA RRP certification. CDPH State Certified Lead Abatement Supervisors and Workers must also become RRP certified, and abatement firms must also be RRP Certified if they do non-abatement jobs.

Contractors and renovators who work or compensation in pre-1978 housing and/or a child-occupied facility that will disturb painted surfaces greater than 6 square feet per room or 20 square feet outside must give Clients a pamphlet called "Renovate Right" and get a signed

receipt before beginning a job. Contractors can call (800) 424-5323 and ask for free copies of "Renovate Right" and the "Small Entity Compliance Guide to Renovate Right" or both can be downloaded as PDF files from the EPA website.

The Consumer Product Safety Commission (CPSC) has defined lead-based paint as surface coatings containing lead concentrations greater than 90 ppm. All children's products, and some furniture, for adult and children, must not contain a concentration of lead greater than 0.009 percent (90 parts per million) in paint or any similar surface coatings. Household paint must also meet this requirement. In 1978, the CPSC banned the sale of lead-based paint to consumers and the use of lead-based paint in residences and public buildings.

Please note that the detection of any amount of lead in a component will trigger numerous requirements from the California Occupations Safety and Health Administration (Cal-OSHA) lead in construction standard (e.g., Title 8, CCR Section 1532.1), even with common tasks such as drywall demolition, manual paint scraping, and manual paint sanding. The employer is required to conduct air sampling to determine the exposure to lead during these tasks and during other tasks that could result in lead exposure. Until actual exposures are determined, workers are required to wear respirators that are appropriate to the task. Detailed requirements are published in the Cal-OSHA standard for lead in construction.

All workers who may be exposed to lead must be trained in the hazards of lead. The results of air sampling are used to determine if workers are exposed to lead above the action level (AL) of 30 micrograms per cubic meter of air or above the permissible exposure limit (PEL) of 50 micrograms of lead per cubic meter of air, averaged over an 8-hour shift. Exposures above the AL or PEL will trigger additional requirements including engineering controls, proper housekeeping, washing facilities for hand and face washing, additional worker training, respiratory protection, medical monitoring, and additional air sampling. The employer must have a written compliance plan.

Lead Paint

Interim controls which are temporary measures may include the following:

- Paint Film Stabilization: "scrape off the loose and flakey paint and reapply with regular house paint".
- Friction (places that rub) and Impact (places that are bumped or banged) Surface Treatments (Doors, windows, cabinets, floors, etc): treated by covering the surfaces with an abrasion-resistant material, or by repairing to an intact working condition in order to minimize dust.
- Special Cleaning: reduction of lead hazard by cleaning up visible dust by HEPA vacuuming, washing and HEPA vacuuming again.

Interim controls typically last less than 20 years and will require the reevaluation of components on a periodic basis.

As of April 22, 2010, the EPA passed the Renovator, Repair and Paint Rule (RRP) (40 CFR Part 745.90) which states all renovation and painting contractors and other trades who work in pre-1978 housing and who might disturb painted surfaces must become Lead Certified Renovators by taking a one-day course about using "Lead Safe Work Practices" on the job.

Abatement methods which eliminate or put a barrier in front of lead hazards may include the following:

- Encapsulation: covering lead paint with a special liquid or thick coating (not regular paint). Works well on surfaces that are in good condition and should not be used on friction or impact surfaces.
- Enclosure: covering lead paint with a solid, dust-tight barrier that is usually mechanically attached (sheetrock, paneling, drywall).
- Replacement: removal of lead covered components (doors, windows, molding) and replacing with lead free components.
- Removal: recommended when other options may not be feasible; removal of lead paint by means of heat guns, scraping and sanding, power tools, chemical stripping and/or use of abrasives and hydro blasting.

Abatement controls typically last more than 20 years. Abatement methods that will result in the smallest amount of dust generated are preferred. Workers who partake in the above abatement methods should be California State Certified Lead Supervisors and Workers. Clearance sampling after abatement must be conducted by a certified lead-based paint inspector

Lead Safe Work Practice Requirements for Maintenance, Renovation or Remodeling

Lead-based paint, deteriorated paint or lead-based hazards require lead safe work practices. These practices are necessary for regular lead based paint hazard controls, repair, remodeling, renovation or other work activities that may disturb lead based paint above HUD's de minimis levels. HUD describes de minimus levels as follows:

- 20 square feet on exterior surfaces
- 2 square feet in any one interior room or space
- 10% of a type of building component with a small surface area (such as painted windowsills) on interior or exterior surfaces

Workers who may disturb lead-based paint above the de minimis level during repair, renovation or maintenance activities or any other work efforts that disturbs a known or assumed lead-based paint above HUD's de minimis shall be trained in lead safe work practices.

Firms providing abatement services must be certified as an abatement firm by the EPA or the State. Workers conducting abatement must be trained and certified as abatement workers by a training provider accredited by the EPA or State.

SECTION 6 DISCLOSURE

A copy of this summary must be provided to new lessees (tenants) and purchasers of this property under Federal Law (24 CFR part 35 and 40 CFR part 745) before they become obligated under a lease or sales contract. The complete report must also be provided to new purchasers and it must be made available to new tenants. Landlords (lessors) and sellers are also required to distribute an educational pamphlet and include standard warning language in their leases or sales contracts to ensure that parents have the information they need to protect their children from lead-based paint hazards.

It is the owner's legal obligation to disclose the inspection results to tenants and/or purchasers before obligation under 24 CFR part 35 and 40 CFR part 745 (published in the Federal Register, Volume 61, Number 45, March 6, 1996, starting on P. 9064; copies of the regulations and related materials can be obtained from the National Lead Information Center Clearinghouse, (1-800-424-LEAD).

SECTION 7 Appendices

Appendix 1

XRF Data Sheet

and

Performance Characteristic Sheet (PCS)

Lead Based Paint XRF Data Sheet

Project: Vanir- Juvenile Hall-Building 9, 331 The City Drive, Orange, CA 92868

Inspection Date: April 1, 2024

(EPA Regulated Lead-Based Paint= 1.0 mg/cm²)

(<LOD= Below Limit of Detection)

					Comp	onent					
Sample #	Unit	Side	Location	Test Location	Structure	Member	Paint Condition	Substrate	Color	XRF Reading (mg/cm2)	Classification (pos, neg, inc.)
1	B-9		Calibration						Red NIST	1.0	
2	B-9		Calibration						Red NIST	0.9	
3	B-9		Calibration						Red NIST	1.0	Negative
4	B-9	A	Mech Rm. 115	Door			Intact	Metal	Green	0.8	Negative
5	B-9	Α	Mech Rm. 115	Door	Frame		Intact	Metal	Green	0.5	Negative
6	B-9	С	Mech Rm. 115	Wall			Intact	Plaster	Tan	0.13	Negative
7	B-9	C	Mech Rm. 115	Wall	Base		Intact	Ceramic	Green	6.1	Positive
8	B-9	C	Mech Rm. 115	Floor	Tile		Intact	Ceramic	Brown	<lod< td=""><td>Negative</td></lod<>	Negative
9	B-9	A	Classroom 15	Door			Intact	Metal	Blue	0.9	Negative
10	B-9	A	Classroom 15	Door	Frame		Intact	Metal	Green	0.13	Negative
11	B-9	A	Classroom 15	Wall			Intact	Concrete	White	0.11	Negative
12	B-9	В	Classroom 15	Wall			Intact	Concrete	White	0.09	Negative
13	B-9	С	Classroom 15	Wall			Intact	Concrete	White	.10	Negative
14	B-9	D	Classroom 15	Wall			Intact	Concrete	White	0.07	Negative
15	B-9	D	Classroom 15	Ceiling	Tile			Intact	Drywall	<lod< td=""><td>Negative</td></lod<>	Negative
16	B-9	В	CR15, Bath	Door			Intact	Metal	Blue	0.6	Negative
17	B-9	В	CR15, Bath	Door	Frame		Intact	Metal	Black	0.19	Negative
18	B-9	С	CR15, Bath	Window	Frame		Intact	Metal	White	0.05	Negative
19	B-9	C	CR15, Bath	Wall			Intact	Concrete	White	0.02	Negative
20	B-9	C	CR15, Bath	Wall	Base	Tile	Intact	Ceramic	Green	4.2	Positive
21	B-9	C	CR15, Bath	Wall	Floor	Tile	Intact	Ceramic	Green	<lod< td=""><td>Negative</td></lod<>	Negative
22	B-9	D	CR15, Bath	Wall	sink		Intact	Porcelain	White	<lod< td=""><td>Negative</td></lod<>	Negative
23	B-9	С	CR15, Bath	Ceiling			Intact	Concrete	White	0.02	Negative

Lead Based Paint XRF Data Sheet

Project: Vanir- Juvenile Hall-Building 9, 331 The City Drive, Orange, CA 92868

Inspection Date: April 1, 2024

(EPA Regulated Lead-Based Paint= 1.0 mg/cm²)

(<LOD= Below Limit of Detection)

			·		Comp	onent					
Sample #	Unit	Side	Location	Test Location	Structure	Member	Paint Condition	Substrate	Color	XRF Reading (mg/cm2)	Classification (pos, neg, inc.)
24	B-9	A	Classroom 16	Door			Intact	Metal	Blue	0.7	Negative
25	B-9	A	Classroom 16	Door	Frame		Intact	Metal	Green	0.21	Negative
26	B-9	A	Classroom 16	Wall			Intact	Concrete	White	0.11	Negative
27	B-9	В	Classroom 16	Wall			Intact	Concrete	White	0.09	Negative
28	B-9	C	Classroom 16	Wall			Intact	Concrete	White	.10	Negative
29	B-9	D	Classroom 16	Wall			Intact	Concrete	White	0.07	Negative
30	B-9	A	Classroom 16	Window	Frame		Intact	Metal	Black	0.06	Negative
31	B-9	C	Classroom 16	Window	Frame		Intact	Metal	Black	0.07	Negative
32	B-9	C	Classroom 16	Floor			Intact	Concrete	Green	>LOD	Negative
33	B-9	D	CR16 Bath	Door			Intact	Metal	Tan	0.21	Negative
34	B-9	D	CR16 Bath	Door	Frame		Intact	Metal	Tan	0.14	Negative
35	B-9	В	CR16 Bath	Wall	Base	Tile	Intact	Ceramic	Green	5.9	Positive
36	B-9	В	CR16 Bath	Floor		Tile	Intact	Ceramic	Green	<lod< td=""><td>Negative</td></lod<>	Negative
37	B-9		CR16 Bath	Window		Frame	Intact	Metal	Tan	0.14	Negative
38	B-9	D	CR 17 Bath	Door			Intact	Metal	Tan	0.17	Negative
39	B-9	D	CR 17 Bath	Door	Frame		Intact	Metal	Tan	0.13	Negative
40	B-9	В	CR 17 Bath	Wall	Base	Tile	Intact	Ceramic	Green	7.2	Positive
41	B-9	В	CR 17 Bath	Floor		Tile	Intact	Ceramic	Green	<lod< td=""><td>Negative</td></lod<>	Negative
42	B-9	A	Classroom 18	Door			Intact	Metal	White	04	Negative
43	B-9	A	Classroom 18	Door	Frame		Intact	Metal	White	0.16	Negative
44	B-9	A	Classroom 18	Wall			Intact	Concrete	White	0.07	Negative
45	B-9	В	Classroom 18	Wall			Intact	Concrete	White	0.02	Negative
46	B-9	С	Classroom 18	Wall			Intact	Concrete	White	.09	Negative

Lead Based Paint XRF Data Sheet

Project: Vanir- Juvenile Hall-Building 9, 331 The City Drive, Orange, CA 92868

Inspection Date: April 1, 2024

(EPA Regulated Lead-Based Paint= 1.0 mg/cm²)

(<LOD= Below Limit of Detection)

					Comp	onent					
Sample #	Unit	Side	Location	Test Location	Structure	Member	Paint Condition	Substrate	Color	XRF Reading (mg/cm2)	Classification (pos, neg, inc.)
47		A	Classroom 18	Window	Frame		Intact	Metal	White	0.11	Negative
48		C	Classroom 18	Window	Frame		Intact	Metal	White	0.07	Negative
49		В	CR18 Bath	Door			Intact	Metal	White	0.5	Negative
50		В		Door	Frame		Intact	Metal	White	0.17	Negative
51		В		Wall	Base	Tile	Intact	Ceramic	Green	5.9	Positive
52		С		Window	Cage		Intact	Metal	White	<lod< td=""><td>Negative</td></lod<>	Negative
53		С		Window	Frame		Intact	Metal	White	0.13	Negative
54		A	Exterior	Wall			Intact	Brick	Red	<lod< td=""><td>Negative</td></lod<>	Negative
55		В	Exterior	Wall			Intact	Brick	Red	<lod< td=""><td>Negative</td></lod<>	Negative
56		C	Exterior	Wall			Intact	Brick	Red	<lod< td=""><td>Negative</td></lod<>	Negative
57		D	Exterior	Wall			Intact	Brick	Red	<lod< td=""><td>Negative</td></lod<>	Negative
58		A		Wall	Fire Box		Intact	Metal	Red	0.3	Negative
59		A		Wall	Overhang		Intact	Concrete	Tan	<lod< td=""><td>Negative</td></lod<>	Negative
60		A		Window	Frame		Intact	Metal	Red	0.10	Negative
61		C		Window	Frame		Intact	Metal	Red	0.08	Negative
62		A		Wall	Fascia		Intact	Window	Frame	<lod< td=""><td>Negative</td></lod<>	Negative
63		C	Rm 104 Elec	Wall	sink		Poor	Porcelain	White	4.7	Positive
			Calibration						Red	1.0	

Performance Characteristic Sheet

EFFECTIVE DATE: September 24, 2004 EDITION NO.: 1

MANUFACTURER AND MODEL:

Make: Niton LLC
Tested Model: XLp 300
Source: 109Cd

Note: This PCS is also applicable to the equivalent model variations indicated

below, for the Lead-in-Paint K+L variable reading time mode, in the XLi and

XLp series:

XLi 300A, XLi 301A, XLi 302A and XLi 303A. XLp 300A, XLp 301A, XLp 302A and XLp 303A. XLi 700A, XLi 701A, XLi 702A and XLi 703A. XLp 700A, XLp 701A, XLp 702A, and XLp 703A.

Note: The XLi and XLp versions refer to the shape of the handle part of the instrument. The differences in the model numbers reflect other modes available, in addition to Lead-in-Paint modes. The manufacturer states that specifications for these instruments are identical for the source, detector, and detector electronics relative to the Lead-in-Paint mode.

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

Lead-in-Paint K+L variable reading time mode.

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm² (inclusive)

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm² in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm² film).

If readings are outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instruments into control before XRF testing proceeds.

SUBSTRATE CORRECTION:

For XRF results using Lead-in-Paint K+L variable reading time mode, substrate correction is <u>not</u> needed for: Brick, Concrete, Drywall, Metal, Plaster, and Wood

INCONCLUSIVE RANGE OR THRESHOLD:

K+L MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm²)
Results not corrected for substrate bias on any	Brick	1.0
substrate	Concrete	1.0
	Drywall	1.0
	Metal	1.0
	Plaster	1.0
	Wood	1.0

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* ("HUD Guidelines"). Performance parameters shown on this sheet are calculated from the EPA/HUD evaluation using archived building components. Testing was conducted in August 2004 on 133 testing combinations. The instruments that were used to perform the testing had new sources; one instrument's was installed in November 2003 with 40 mCi initial strength, and the other's was installed June 2004 with 40 mCi initial strength.

OPERATING PARAMETERS:

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

SUBSTRATE CORRECTION VALUE COMPUTATION:

Substrate correction is not needed for brick, concrete, drywall, metal, plaster or wood when using Lead-in-Paint K+L variable reading time mode, the normal operating mode for these instruments. If substrate correction is desired, refer to Chapter 7 of the HUD Guidelines for guidance on correcting XRF results for substrate bias.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing. Use the K+L variable time mode readings.

Conduct XRF retesting at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below.

Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family housing a result is defined as the average of three readings. In multifamily housing, a result is a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF results.

Compute the average of all ten re-test XRF results.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

TESTING TIMES:

For the Lead-in-Paint K+L variable reading time mode, the instrument continues to read until it is moved away from the testing surface, terminated by the user, or the instrument software indicates the reading is complete. The following table provides testing time information for this testing mode. The times have been adjusted for source decay, normalized to the initial source strengths as noted above. Source strength and type of substrate will affect actual testing times. At the time of testing, the instruments had source strengths of 26.6 and 36.6 mCi.

Testing Times Using K+L Reading Mode (Seconds)							
		All Data		Median for laboratory-measured lead levels (mg/cm²)			
Substrate	25 th Percentile	Median	75 th Percentile	Pb < 0.25	0.25 <u><</u> Pb<1.0	1.0 <u><</u> Pb	
Wood Drywall	4	11	19	11	15	11	
Metal	4	12	18	9	12	14	
Brick Concrete Plaster	8	16	22	15	18	16	

CLASSIFICATION RESULTS:

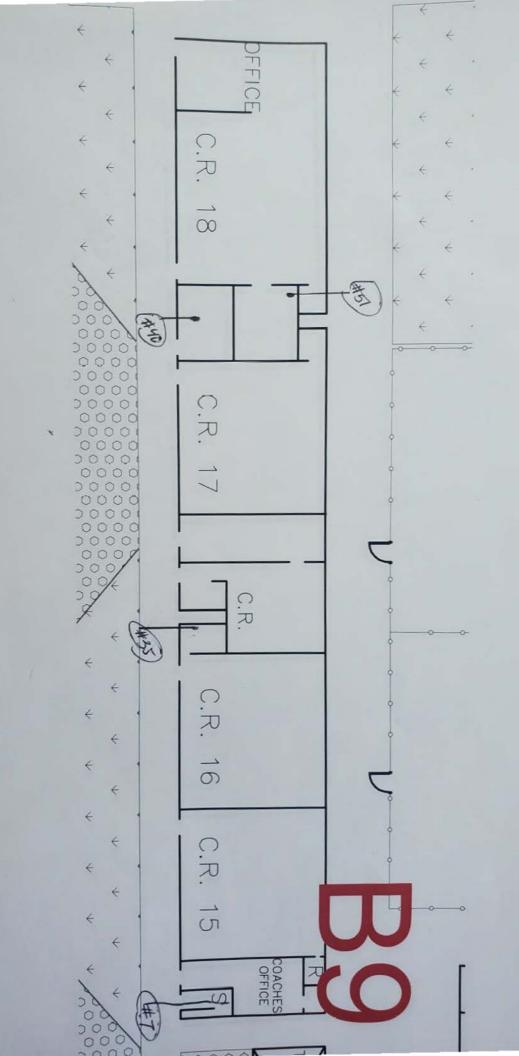
XRF results are classified as positive if they are greater than or equal to the threshold, and negative if they are less than the threshold.

DOCUMENTATION:

A document titled *Methodology for XRF Performance Characteristic Sheets* provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. For a copy of this document call the National Lead Information Center Clearinghouse at 1-800-424-LEAD.

This XRF Performance Characteristic Sheet was developed by the Midwest Research Institute (MRI) and QuanTech, Inc., under a contract between MRI and the XRF manufacturer. HUD has determined that the information provided here is acceptable when used as guidance in conjunction with Chapter 7, Lead-Based Paint Inspection, of HUD's *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*.

APPENDIX 2 SITE DRAWING



Appendix 3

Glossary





Glossary

AALA: American Association for Laboratory Accreditation. Also known as A2LA.

Abatement: A measure or set of measures designed to permanently eliminate lead-based paint hazards or lead-based paint. Abatement strategies include the removal of lead-based paint, enclosure, encapsulation, replacement of building components coated with lead-based paint, removal of lead-contaminated dust, and removal of lead-contaminated soil or overlaying of soil with a durable covering such as asphalt (grass and sod are considered interim control measures). All of these strategies require preparation; cleanup; waste disposal; postabatement clearance testing; recordkeeping; and, if applicable, monitoring. See also Complete abatement and Interim controls.

Abrasion resistance: Resistance of the paint to wear by rubbing or friction; related to both toughness and gloss.

Accessible surface: Any protruding interior or exterior surface, such as an interior window sill, that a young child can mouth or chew.

Accreditation: A formal recognition that an organization, such as a laboratory, is competent to carry out specific tasks or types of tests.

Accredited laboratory: A laboratory that has been evaluated and approved by the National Lead Laboratory Accreditation Program (NLLAP), to perform lead measurement or analysis, usually over a specified period of time.

Accredited training provider: A training provider who meets the standards established by EPA for the training of risk assessors, inspectors, lead-based paint hazard control contractors, and workers.

Accuracy: The degree of agreement between an observed value and an accepted reference value (a "true" value); a data quality indicator. Accuracy includes a combination of random errors (precision) and systematic errors (bias) due to sampling and analysis.

Acrylic: A synthetic resin used in highperformance waterborne coatings; a coating whose binder contains acrylic resins.

Adhesion: The ability of dry paint or other coating to attach to a surface and remain fixed on it without blistering, flaking, cracking, or being susceptible to removal by tape.

Administrative removal: The temporary removal of workers from the job to prevent the concentration of lead in their blood from reaching levels requiring medical removal.

AIHA: American Industrial Hygiene Association.

ALC: See Apparent Lead Concentration.

Aliquot: See Subsample.

Alkali: A chemical, such as Iye, soda, lime, etc., that will neutralize an acid. Oil paint films can be destroyed by alkalies. Some paint removal products contain alkaline substances.

Alkyd: Synthetic resin modified with oil; coating that contains alkyd resins in the binder.

Apparent Lead Concentration (ALC): The x-ray fluorescence (XRF) reading or average of more than one reading on a painted surface. See also XRF analyzer, Substrate Equivalent Lead (SEL), and Corrected Lead Concentration (CLC).

Bare soil: Soil not covered with grass, sod, some other similar vegetation, or paving, including the sand in sandboxes.





Bias: A systematic error in the measurement process. For XRF readings, one source of bias is the substrate effect. See also Substrate effect and XRF analyzer.

Biennial report (for hazardous waste): A report (EPA Form 8700–13A) submitted by generators of hazardous waste to the EPA Regional Administrator. The report is due on March 1 of even-numbered years. The report includes information on the generator's activities during the previous calendar year. The owners and operators of treatment, storage, and disposal facilities must also prepare and submit biennial reports using EPA Form 8700–1313.

Binder: Solid ingredients in a coating that hold the pigment particles in suspension and bind them to the substrate. Binders used in paints and coatings include oil, alkyd, acrylic, latex, and epoxy. The nature and amount of binder determines many of the coating's performance properties—washability, toughness, adhesion, gloss, etc. See also Pigment.

Biological monitoring: The analysis of blood, urine, or both to determine the level of lead contamination in the body. Blood lead levels are expressed in micrograms of lead per deciliter (one-tenth of a liter) of blood, or $\mu g/dL$. They are also expressed in micromoles per liter ($\mu mol/L$).

Blank: A nonexposed sample of the medium being used for testing (i.e., wipe or filter) that is analyzed to determine if the medium has been contaminated with lead (e.g., at the factory or during transport).

Blind sample: A subsample submitted for analysis with a composition and identity known to the submitter but not to the analyst; used to test the analyst's or laboratory's proficiency in conducting measurements. See also Spiked sample.

Blood lead threshold: Any blood lead level greater than or equal to 10 $\mu g/dL$ as defined by the Centers for Disease Control and Prevention. See also Elevated Blood Lead level (EBL) child.

Building component: Any element of a building that may be painted or have dust on its surface, e.g. walls, stair treads, floors, railings, doors, window sills, etc.

Building component replacement: See Replacement.

Cementitious material: A material that is mixed with water, either with or without aggregate, to provide the plasticity, cohesion, and adhesion necessary for the placement and formation of a rigid mass (ASTM Standard C 11).

Centimeter: See cm.

Certification: The process of testing and evaluating against certain specifications the competence of a person, organization, or other entity in performing a function or service, usually for a specified period of time.

Certified: The designation for contractors who have completed training and other requirements to allow them to safely undertake risk assessments, inspections, or abatement work. Risk assessors, inspectors, and abatement contractors should be certified by the appropriate local, State or Federal agency.

Certified Industrial Hygienist (CIH): A person who has passed the 2-day certification exam of the American Board of Industrial Hygiene, and who has at least 4 years of experience in industrial hygiene and a graduate degree or a total of 5 years of experience. See also Industrial hygienist.

Certified reference material (CRM): Reference material that has at least one of its property values established by a technically valid procedure and is accompanied by or traceable to a certificate or other documentation issued by a certifying body. See also Standard reference material.

CFR: See Code of Federal Regulations.

Chalking: The photo-oxidation of paint binders—usually due to weathering—that causes a powder to form on the film surface.





Characteristics (of hazardous waste): EPA has identified four characteristics of hazardous waste: ignitability, corrosivity, reactivity, and toxicity (as determined by the TCLP test). Any solid waste that exhibits at least one of these characteristics may be classified as hazardous under the Resource Conservation and Recovery Act (RCRA), depending on how the waste is produced and what quantities are generated. See also Toxicity Characteristic Leaching Procedure (TCLP).

Chewable surface: See Chewed surface and Accessible surface.

Chewed surface: Any painted surface that shows evidence of having been chewed or mouthed by a young child. A chewed surface is usually a protruding, horizontal part of a building, such as an interior window sill. See also Accessible surface.

CLC: See Corrected Lead Concentration (CLC).

Cleaning: The process of using a HEPA vacuum and wet cleaning agents to remove leaded dust; the process includes the removal of bulk debris from the work area. OSHA prohibits the use of compressed air to clean lead-contaminated dust from a surface.

Clearance examination: Visual examination and collection of environmental samples by an inspector or risk assessor and analysis by an accredited laboratory upon completion of an abatement project, interim control intervention, or maintenance job that disturbs lead-based paint (or paint suspected of being lead-based). The clearance examination is performed to ensure that lead exposure levels do not exceed standards established by the EPA Administrator pursuant to Title IV of the Toxic Substances Control Act, and that any cleaning following such work adequately meets those standards.

Clearance examiner: A person who conducts clearance examinations following lead-based paint hazard control and cleanup work, usually a certified risk assessor or a certified inspector.

cm: Centimeter; 1/100 of a meter.

Code of Federal Regulations (CFR): The codification of the regulations of Federal agencies. The regulations are published in the Federal Register. See also Federal Register (FR).

Cohesion: Ability of a substance to adhere to itself; internal adhesion; the force holding a substance together.

Common area: A room or area that is accessible to all residents in a community (e.g., hallways or lobbies); in general, any area not kept locked.

Competent person: As defined in the OSHA Lead Construction Standard (29 CFR 1926.62), a person who is capable of identifying or predicting hazardous working conditions and work areas, and who has authorization to take prompt, corrective measures to eliminate the hazards. A competent person is not necessarily a risk assessor, inspector, or abatement project supervisor.

Complete abatement: Abatement of all lead-based paint inside and outside a dwelling or building and reduction of any lead-contaminated dust or soil hazards. All of these strategies require preparation; cleanup; waste disposal; postabatement clearance testing; recordkeeping; and, if applicable, reevaluation and on-going monitoring. See also Abatement.

Compliance plan: A document that describes the types of tasks, workers, protective measures, and tools and other materials that may be employed in lead-based paint hazard control to comply with the OSHA Lead Exposure in Construction standard.

Composite sample: A single sample made up of individual subsamples. Analysis of a composite sample produces the arithmetic mean of all subsamples.

Containment: A process to protect workers and the environment by controlling exposures to the lead-contaminated dust and debris created during abatement. See Worksite preparation level.





Contingency plan: A document that describes an organized, planned, and coordinated course of action to be taken during any event that threatens human health or the environment, such as a fire, explosion, or the release of hazardous waste or its constituents from a treatment, storage, or disposal facility.

Corrected Lead Concentration (CLC): The absolute difference between the Apparent Lead Concentration and the Substrate Equivalent Lead. See also Apparent Lead Concentration (ALC) and Substrate Equivalent Lead (SEL).

Detection limit: The minimum amount of a substance that can be reliably measured by a particular method.

Deteriorated lead-based paint: Any lead-based paint coating on a damaged or deteriorated surface or fixture, or any interior or exterior lead-based paint that is peeling, chipping, blistering, flaking, worn, chalking, alligatoring, cracking, or otherwise becoming separated from the substrate.

Digestion blank: A mixture of the reagents used for digesting of paint, soil, or dust matrixes but without the matrix. The blank undergoes all the steps of the analysis, starting with digestion. The blank is used to evaluate the contamination process from a laboratory.

Direct-reading XRF: An analyzer that provides the operator with a display of lead concentrations calculated from the lead K x ray intensity without a graphic of the spectrum usually in mg/cm² (milligrams of lead per square centimeter of painted surface area). See also XRF analyzer.

Disposal (of hazardous waste): The discharge, deposit, injection, dumping, spilling, leaking, or placement of solid or hazardous waste on land or in water so that none of its constituents can pollute the environment by being emitted into the air or discharged into a body of water, including groundwater.

Disposal facility: A facility or part of one in which hazardous waste is placed on land or in water to remain there after the facility closes.

Door mat: See Walk-off mat.

Dust removal: A form of interim control that involves initial cleaning followed by periodic monitoring and recleaning, as needed. Depending on the severity of lead-based paint hazards, dust removal may be the primary activity or just one element of a broader control effort.

Dust trap: A surface, component, or furnishing that serves as a reservoir where dust can accumulate.

EBL child: See Elevated Blood Lead level (EBL) child.

Efflorescence: The salt rising to the surface of a material, such as masonry, plaster, or cement, caused by the movement of water through the material. Paint or encapsulants may not adhere to a surface contaminated with efflorescence.

Elastomeric: A group of pliable, elastic liquid encapsulant coatings. An elastomer is a macromolecular material which, at room temperature, is capable of substantially recovering its size and shape after the force causing its deformation is removed (see ASTM D 907, D-14).

Elevated Blood Lead level (EBL) child: A child who has a blood lead level greater than or equal to 20 μg/dL or a persistent 15 μg/dL. See also Blood lead threshold.

Encapsulation: Any covering or coating that acts as a barrier between lead-based paint and the environment, the durability of which relies on adhesion and the integrity of the existing bonds between multiple layers of paint and between the paint and the substrate. See also Enclosure.

Enclosure: The use of rigid, durable construction materials that are mechanically fastened to the substrate to act as a barrier between the lead-based paint and the environment.





Engineering controls: Measures other than respiratory protection or administrative controls that are implemented at the work site to contain, control, and/or otherwise reduce exposure to lead-contaminated dust and debris usually in the occupational health setting. The measures include process and product substitution, isolation, and ventilation.

Epoxy paint: Paint based on an epoxy resin. An epoxy resin is a cross-linking resin the reactivity of which depends on the epoxide group.

Evaluation: Risk assessment, paint inspection, reevaluation, investigation, clearance examination, or risk assessment screen.

Examination: See Clearance examination.

Examiner: A person certified to conduct clearance examinations or reevaluations, usually a certified inspector or certified risk assessor.

Exposure monitoring: The sampling and analysis of air both inside and outside the work area to determine the degree of worker and resident exposure to lead or other airborne contaminants, often involving air sampling inside a worker's breathing zone.

Exterior work area: For lead hazard control work, the exterior work area includes any exterior building components, such as a porch or stairway; the safety perimeter; and access barriers.

Facility (pertaining to hazardous waste): All buildings, contiguous land, structures, and other appurtenances, as well as any improvements, where lead-based paint or hazardous waste is treated, stored, or disposed. A facility may consist of several different treatment, storage, or disposal units, such as landfills and surface impoundments.

Federal Register (FR): A daily Federal publication that contains proposed and final regulations, rules, and notices.

Fibermat: A semirigid woven material attached with a liquid adhesive to a surface or substrate.

Field blank: A clean sample of the matrix (e.g., filter, or wipe) that has been exposed to the sampling conditions; returned to the laboratory; and analyzed as an environmental sample. Clean quartz sand, air sampling filters and cassettes, and clean wipes can be used as field blanks. The field blank, which should be treated just like the sample, indicates possible sources of contamination.

FR: See Federal Register (FR).

Friction surface: Any interior or exterior surface, such as a window or stair tread, subject to abrasion or friction.

Generator: Any person whose act or operation produces hazardous waste identified or listed in 40 CFR Part 261 or whose act causes a hazardous waste to come under regulation (40 CFR 260.10).

Generator identification number: The unique number assigned by EPA to each generator; transporter of hazardous waste; and treatment, storage, or disposal facility.

Hazardous waste: As defined in EPA regulations (40 CFR 261.3), hazardous waste is solid waste or a combination of solid wastes that because of its quantity; concentration; or physical, chemical, or infectious characteristics may cause or significantly contribute to increases in mortality, serious and irreversible or incapacitating but reversible illnesses, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed. As defined in the regulations, solid waste is hazardous if it meets one of four conditions: (1) exhibits a characteristic of hazardous waste (40 CFR Sections 261.20 through 262.24); (2) has been listed as hazardous (40 CFR Section 261.31 through 261.33); (3) is a mixture containing a listed hazardous waste combined with a nonhazardous solid waste, unless the mixture is specifically excluded or no longer exhibits any of the characteristics of hazardous waste; and (4) is not excluded from regulation as hazardous waste. For lead-based paint abatement





waste, hazardous waste is waste that contains more than 5 ppm of leachable lead as determined by the TCLP test, or is waste that is corrosive, ignitable, or reactive and not otherwise excluded.

Hazardous Waste Manifest: See Manifest.

Heat gun: A device capable of heating leadbased paint causing it to separate from the substrate. For lead hazard control work, the heat stream leaving the gun should not exceed 1,100 °F (some authorities may use a different temperature).

HEPA filter: See High-Efficiency Particulate Air (HEPA) filter.

HEPA/wet wash/HEPA cycle: The cleaning cycle that begins with HEPA vacuuming, followed by a wet wash with a lead-specific cleaning agent, such as trisodium phosphate detergent or another liquid cleaning agent, followed by a final pass with a HEPA vacuum over the surface.

High-Efficiency Particulate Air (HEPA) filter: A filter capable of removing particles of 0.3 microns or larger from air at 99.97 percent or greater efficiency.

High phosphate detergent: See Trisodium phosphate (TSP) detergent.

Impact surface: An interior or exterior surface (such as surfaces on doors) subject to damage by repeated impact or contact.

Incinerator: An enclosed device using controlled flame combustion that neither meets the criteria for classification as a boiler nor is listed as an industrial furnace.

Industrial hygienist: A person having a college or university degree in engineering, chemistry, physics, medicine, or a related physical or biological science who, by virtue of special training, is qualified to anticipate, recognize, evaluate, and control environmental and occupational health hazards and the impact of those hazards on the community and workers.

In-place management: See Interim controls.

Inspection (of paint): A surface-by-surface investigation to determine the presence of lead-based paint (in some cases including dust and soil sampling) and a report of the results.

Inspector: An individual who has completed training from an accredited program and been licensed or certified by the appropriate State or local agency to (1) perform inspections to determine and report the presence of lead-based paint on a surface-by-surface basis through onsite testing, (2) report the findings of such an inspection, (3) collect environmental samples for laboratory analysis, (4) perform clearance testing, and (5) document successful compliance with lead-based paint hazard control requirements or standards.

Interim controls: A set of measures designed to temporarily reduce human exposure or possible exposure to lead-based paint hazards. Such measures include specialized cleaning, repairs, maintenance, painting, temporary containment, and management and resident education programs. Monitoring, conducted by owners, and reevaluations, conducted by professionals, are integral elements of interim control. Interim controls include dust removal; paint film stabilization; treatment of friction and impact surfaces; installation of soil coverings, such as grass or sod; and land-use controls. See also Monitoring, Reevaluation, and Abatement.

Interior window sill: The portion of the horizontal window ledge that protrudes into the interior of the room, adjacent to the window sash when the window is closed; often called the window stool.

Investigation (pertaining to EBL case): The process of determining the source of lead exposure for a child or other resident with an elevated blood lead level. Investigation consists of administration of a questionnaire, comprehensive environmental sampling, case management, and other measures.





Investigator: A person who conducts an investigation of a dwelling where a resident has an elevated blood lead level. The investigator must be proficient in interviewing techniques, environmental sampling, and the interpretation of risk assessment and environmental sampling data.

Laboratory analysis: A determination of the lead content by atomic absorption spectroscopy, inductively coupled plasma emission spectroscopy, or laboratory-based K or L x-ray fluorescence, or an equivalent method.

Landfill: A State-licensed or State-permitted disposal facility that meets municipal solid waste standards (see Federal regulations at 40 CFR 258).

Landfill liner: A continuous layer of natural or synthetic materials placed beneath and sometimes around a surface impoundment, landfill, or landfill cell. The layer restricts the downward or lateral escape of hazardous waste, hazardous waste constituents, or leachate (40 CFR Part 258).

Latex: A waterborne emulsion paint made with synthetic binders, such as 100-percent acrylic, vinyl acrylic, terpolymer, or styrene acrylic; a stable emulsion of polymers and pigment in water.

Lead: Lead includes metallic lead and inorganic and organic compounds of lead.

Lead-based paint: Any paint, varnish, shellac, or other coating that contains lead equal to or greater than 1.0 mg/cm² as measured by XRF or laboratory analysis, or 0.5 percent by weight $(5,000~\mu\text{g/g},\,5,000~\text{ppm},\,\text{or}\,5,000~\text{mg/kg})$ as measured by laboratory analysis. (Local definitions may vary.)

Lead-based paint hazard: A condition in which exposure to lead from lead-contaminated dust, lead-contaminated soil, or deteriorated lead-based paint would have an adverse effect on human health (as established by the EPA Administrator under Title IV of the Toxic Substances Control Act). Lead-based paint hazards

include for example, deteriorated lead-based paint, leaded dust levels above applicable standards, and bare leaded soil above applicable standards.

Lead-based paint hazard control: Activities to control and eliminate lead-based paint hazards, including interim controls, abatement, and complete abatement.

Lead-based paint abatement planner/designer: An individual who has completed an accredited training program on planning and designing lead-based paint abatement projects.

Lead-based paint abatement worker: See Worker.

Lead carbonate: A pigment used in some leadbased paints as a hiding agent; also known as white lead.

Lead-contaminated dust: Surface dust in residences that contains an area or mass concentration of lead in excess of the standard established by the EPA Administrator, pursuant to Title IV of the Toxic Substances Control Act. Until the EPA standards are set, the HUD-recommended clearance and risk assessment standards for leaded dust are 100 $\mu g/ft^2$ on floors, 500 $\mu g/ft^2$ on interior window sills, and 800 $\mu g/ft^2$ on window troughs. The recommended standard for lead hazard screens for floors is 50 $\mu g/ft^2$ and for window troughs is 400 $\mu g/ft^2$.

Lead-contaminated soil: Bare soil on residential property that contains lead in excess of the standard established by the EPA Administrator, pursuant to Title IV of the Toxic Substances Control Act. The HUD-recommended standard and interim EPA guidance is 400 $\mu g/g$ for high-contact play areas and 2,000 $\mu g/g$ in other bare areas of the yard. Soil contaminated with lead at levels greater than or equal to 5,000 $\mu g/g$ should be abated by removal or paving.

Lead-free dwelling: A lead-free dwelling contains no lead-based paint and has interior dust and exterior soil lead levels below the applicable HUD and EPA standards.





Lead hazard screen: A means of determining whether residences in good condition should have a full risk assessment. Also called a risk assessment screen.

Lead-poisoned child: A child with a single blood lead level that is greater than or equal to 20 μ g/dL or consecutive blood lead levels greater than or equal to 15 μ g/dL. Local definitions may vary.

Lead-specific detergent: A cleaning agent manufactured specifically for cleaning and removing leaded dust or other lead contamination.

Leaded dust: See Lead-contaminated dust.

Leaded zinc: A paint primer made from zinc oxide and lead sulfates.

Licensed: Holding a valid license or certification issued by EPA or by an EPA-approved State program pursuant to Title IV of the Toxic Substances Control Act. The license is based on certification for lead-based paint hazard control work. See also Certified.

Listed waste: A hazardous waste that has been placed on one of three lists developed by EPA: nonspecific source wastes, specific source wastes, and commercial chemical products. The lists were developed by examining different types of waste and chemical products to determine if they exhibited one of the four characteristics of hazardous waste (toxicity, corrosivity, ignitability, or reactivity), met the statutory definition of hazardous waste, were acutely toxic or acutely hazardous, or were otherwise toxic.

Maintenance: Work intended to maintain adequate living conditions in a dwelling, which has the potential to disturb lead-based paint or paint that is suspected of being lead-based.

Manifest: The shipping document (EPA Form 8700–22 or a comparable form required by the State or locality) used for identifying the quantity, composition, origin, routing, and destination of hazardous waste during its transport

from the point of generation to the point of treatment, storage, or disposal. Also, a shipping document used to keep track of items being transported. All hazardous waste must be accompanied by a manifest. See Hazardous waste.

Mat: See Walk-off mat.

Matrix blank: A sample of the matrix (paint chips, soil, or dust) that does not contain the analyte lead. This sample goes through the complete analysis, including digestion.

MDL: See Method detection limit (MDL).

Mean: The arithmetic average of a series of numerical data values; for example, the algebraic sum of the data values divided by the number of data values.

Medical removal: The temporary removal of workers from the job because of the occurrence of elevated blood lead levels as defined in the OSHA Lead Exposure in Construction standard (29 CFR 1926.62).

Method blank: See Digestion blank.

Method detection limit (MDL): The minimum concentration of an analyte that, for a given matrix and method, has a 99-percent probability of being identified, qualitatively or quantitatively measured, and reported to be greater than zero.

mg: Milligram; 1/1,000 of a gram.

Microgram: See µg.

Mil: 1/1,000 of an inch; used to measure thickness.

Milligram: See mg.

Monitoring: Surveillance to determine (1) that known or suspected lead-based paint is not deteriorating, (2) that lead-based paint hazard controls, such as paint stabilization, enclosure, or encapsulation have not failed, (3) that structural problems do not threaten the integrity of hazard controls or of known or suspected





lead-based paint, and (4) that dust lead levels have not risen above applicable standards. There are two types of monitoring activities; visual surveys by property owners and reevaluations by certified risk assessors. Visual surveys are generally conducted annually for the purpose of making the first three determinations listed above. Reevaluations are conducted in accordance with the Standard Reevaluation Schedule (or more frequently, if needed) for the purpose of making all four determinations. Monitoring is not required in properties known to be free of lead-based paint. See also Reevaluation and Standard reevaluation schedule.

Monofil: A State-approved landfill that accepts only construction debris.

Mouthable surface: See Chewed surface.

Multifamily housing: Housing that contains more than one dwelling unit per location.

NLLAP requirements: Requirements, specified by the EPA National Lead Laboratory Accreditation Program (NLLAP), for accreditation for the lead analysis of paint, soil, and dust matrixes by an EPA-recognized laboratory accreditation organization.

Offsite paint removal: The process of removing a component from a building and stripping the paint from the component at an offsite paint-stripping facility.

Ongoing monitoring: See Monitoring.

Owner: A person, firm, corporation, guardian, conservator, receiver, trustee, executor, government agency or entity, or other judicial officer who, alone or with others, owns, holds, or controls the freehold or leasehold title or part of the title to property, with or without actually possessing it. This definition includes a vendee who possesses the title, but does not include a mortgagee or an owner of a reversionary interest under a ground rent lease.

Oxidation: A chemical reaction that occurs upon exposure to oxygen. Some coatings cure by oxidation; oxygen enters the liquid coating and crosslinks (attaches) the resin molecules. This film-forming method is also called "air cure" or "air dry." Oxidation also causes rust to form on metals and paint to chalk.

Paint film stabilization: The process of wet scraping, priming, and repainting surfaces coated with deteriorated lead-based paint; paint film stabilization includes cleanup and clearance.

Paint removal: An abatement strategy that entails the removal of lead-based paint from surfaces. For lead hazard control work, this can mean using chemicals, heat guns below 1,100 °F, and certain *contained* abrasive methods. Open flame burning, open abrasive blasting, sandblasting, water blasting, and extensive dry scraping are prohibited paint removal methods. (Methylene chloride paint removers and dry scraping are also not recommended.)

Patch test: A test method or procedure to assess the adhesion of an encapsulant coating to a substrate covered with a layer or layers of lead-based paint.

Personal breathing zone samples: Air samples collected from the breathing zone of a worker (within a 1-foot radius of the worker's mouth) but outside the respirator. The samples are collected with a personal sampling pump operating at 2 liters per minute, drawing air through a 37 mm mixed cellulose ester filter housed in a closed-face cassette with a pore size of 0.8 microns. See Exposure monitoring.

Personal Protective Equipment (PPE): Equipment for protecting the eyes, face, head, and/or extremities; includes protective clothing, respiratory devices, and protective shields; used when hazards capable of causing bodily injury or impairment are encountered.





PHA: See Public Housing Agency (PHA).

Pigment: Insoluble, finely ground materials that give paint its properties of color and hide.

Pigment Volume Concentration (PVC): Pigment volume as a percentage of the total non-volatile ingredients.

Pilot project: In multifamily housing, the testing of a lead-based paint hazard control strategy on a limited number of dwellings, usually those that are vacant, to determine the feasibility of carrying out such a strategy in the entire multifamily housing development; usually involves paint testing, air sampling, wipe sampling, worksite preparation, and a variety of lead-based paint hazard control treatments.

Plastic: See Polyethylene plastic.

Polyethylene plastic: All references to polyethylene plastic refer to 6-mil plastic sheeting or polyethylene bags (or doubled bags if using 4-mil polyethylene bags), or any other thick plastic material shown to demonstrate at least equivalent performance. Plastic used to contain waste should be capable of completely containing the waste and, after being properly sealed, should remain leak-tight with no visible signs of discharge during movement or relocation.

Polyurethane: An exceptionally hard and wear-resistant coating created by the reaction of polyols with a multifunctional isocyanate; often used to seal wood floors following lead-based paint hazard control work and cleaning.

Precision: The degree to which a set of observations or measurements of the same property, usually obtained under similar conditions, conform to themselves; a data quality indicator. Precision is usually expressed in either absolute or relative terms as standard deviation, variance, or range. Often known as "reproducibility."

Primary prevention: The process of controlling lead hazards to prevent exposure *before* a child is poisoned. See Secondary prevention and Tertiary prevention.

Primary standard: A substance or device with a property or value that is unquestionably accepted, within specified limits, in establishing the value of the same or related property of another substance or device.

Public Housing Agency (PHA): Any State, county, municipality, or other government entity or public body, or agency or instrumentality thereof, authorized to engage or assist in the development or operation of housing for low-income families.

PVC: See Pigment Volume Concentration (PVC).

Quality Assurance (QA): An integrated system of activities involving planning, quality control, quality assessment, reporting, and quality improvement to ensure that a product or service meets defined standards of quality within a stated level of confidence.

Quality Control (QC): The overall system of technical activities whose purpose is to measure and control the quality of a product or service so that it meets the needs of users. The aim is to provide a level of quality that is satisfactory, adequate, dependable, and economical.

Random sample: A sample drawn from a population in a way that allows each member of the population to have an equal chance of being selected. Random sampling is a process used to identify locations for the lead-based paint inspections in multifamily dwellings. See also Targeted sample and Worst-case sample.

RCRA: See Resource Conservation and Recovery Act (RCRA).

Reevaluation: In lead hazard control work, the combination of a visual assessment and collection of environmental samples performed by a certified risk assessor to determine if a previously implemented lead-based paint hazard control measure is still effective and if the dwelling remains lead-safe.





Reference material: A material or substance that has at least one sufficiently well established property that can be used to calibrate an apparatus, assess a measurement method, or assign values to materials.

Reinspection: See Reevaluation.

Removal: See Paint removal.

Renovation: Work that involves construction and/or home or building improvement measures such as window replacement, weatherization, remodeling, and repainting.

Replacement: A strategy of abatement that entails the removal of building components coated with lead-based paint (such as windows, doors, and trim) and the installation of new components free of lead-based paint.

Representative sample: A sample of a universe or whole (e.g., waste sample pile, lagoon, groundwater, or waste stream) that can be expected to exhibit the average properties of the entire universe or whole.

Resident: A person who lives in a dwelling.

Resource Conservation and Recovery Act (RCRA): The primary Federal statute governing waste management from generation to disposal. RCRA defines the criteria for hazardous and nonhazardous waste.

Risk assessment: An onsite investigation of a residential dwelling to discover any lead-based paint hazards. Risk assessments include an investigation of the age, history, management, and maintenance of the dwelling, and the number of children under age 6 and women of childbearing age who are residents; a visual assessment; limited environmental sampling (i.e., collection of dust wipe samples, soil samples, and deteriorated paint samples); and preparation of a report identifying acceptable abatement and interim control strategies based on specific conditions.

Risk assessment screen: A type of risk assessment performed only in buildings in good condition using fewer samples but more stringent evaluation criteria (standards) to determine lead hazards.

Risk assessor: A certified individual who has completed training with an accredited training program and who has been certified to (1) perform risk assessments, (2) identify acceptable abatement and interim control strategies for reducing identified lead-based paint hazards, (3) perform clearance testing and reevaluations, and (4) document the successful completion of lead-based paint hazard control activities.

Sample site: A specific spot on a surface being tested for lead concentration.

Saponification: The chemical reaction between alkalies and oil that produces a type of soap. Because of saponification, oil and alkyd coatings will not adhere to masonry substrates, galvanized metals, or zinc-rich primers. Also a form of incompatibility between types of coatings.

Screen: See Risk assessment screen or Lead hazard screen.

Screening: The process of testing children to determine if they have elevated blood lead levels.

Secondary prevention: The process of identifying children who have elevated blood lead levels through screening and controlling or eliminating the sources of further exposure. See also Primary prevention and Tertiary prevention.

SEL: See Substrate Equivalent Lead (SEL).

Site: The land or body of water where a facility is located or an activity is conducted. The site includes adjacent land used in connection with the facility or activity.





Small-quantity generator: Owners, contractors (generators), or both who produce less than 100 kg of hazardous waste per month and accumulate less than 100 kg of hazardous waste at any one time, or who produce less than 1 kg of acutely hazardous waste per month and accumulate less than 1 kg of acutely hazardous waste at any one time.

Soil: See Bare soil.

Solid waste: As defined by RCRA, the term solid waste means garbage; refuse; sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility; or other discarded materials, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations or from community activities. The term does not include solid or dissolved material in domestic sewage or solid or dissolved material in irrigation return flows or industrial discharges (which are point sources subject to permits under the Clean Water Act), nor does the term include special nuclear or byproduct material as defined by the Atomic Energy Act of 1954.

Spectrum analyzer: A type of XRF analyzer that provides the operator with a plot of the energy and intensity, or counts of both K and L x-ray spectra, as well as a calculated lead concentration. See also XRF analyzer.

Spiked matrix: See Spiked sample.

Spiked sample: A sample prepared by adding a known mass of the target analyte (e.g., leaded dust) to a specific amount of matrix sample (e.g., one dust wipe) for which an independent estimate of the target analyte concentration is available. Spiked samples are used to determine, for example, the effect of the matrix on a method's recovery efficiency. See also Blind sample.

Spot-prime: To apply a paint primer to localized areas of exposed substrate.

Standard deviation: A measure of the precision of a reading; the spread of the deviation from the mean. The smaller the standard deviation, the more precise the analysis. The standard deviation is calculated by first obtaining the mean, or the arithmetic average, of all of the readings. A formula is then used to calculate how much the individual values vary from the mean—the standard deviation is the square root of the arithmetic average of the squares of the deviation from the mean. Many hand calculators have an automatic standard deviation function. See also Mean.

Standard reevaluation schedule (SRS): A schedule that determines the frequency that reevaluations should be performed on a property.

Standard reference material (SRM): A certified reference material produced by the National Institute of Standards and Technology (U.S. Department of Commerce) and characterized for absolute content independent of analytical method. See also Certified reference material.

Subsample: A representative portion of a sample. A subsample may be either a field sample or a laboratory sample. A subsample is often combined with other subsamples to produce a composite sample. See also Composite sample.

Substrate: A surface on which paint, varnish, or other coating has been applied or may be applied. Examples of substrates include wood, plaster, metal, and drywall.

Substrate effect: The radiation returned to an XRF analyzer by the paint, substrate, or underlying material, in addition to the radiation returned by any lead present. This radiation, when counted as lead x-rays by an XRF analyzer contributes to substrate equivalent lead (bias). The inspector may have to compensate for this effect when using XRF analyzers. See also XRF analyzer.





Substrate Equivalent Lead (SEL): The XRF measurement taken on an unpainted surface; used to calculate the corrected lead concentration on a surface by using the following formula: Apparent Lead Concentration—Substrate Equivalent Lead = Corrected Lead Concentration. See also Apparent Lead Concentration (ALC), Corrected Lead Concentration (CLC), and XRF analyzer.

Target housing: Any residential unit constructed before 1978, except dwellings that do not contain bedrooms or dwellings that were developed specifically for the elderly or persons with disabilities—unless a child younger than 6 resides or is expected to reside in the dwelling. In the case of jurisdictions that banned the sale or use of lead-based paint before 1978, the Secretary of HUD may designate an earlier date for defining target housing.

Targeted sample: A sample of dwelling units selected from an apartment building or housing development using information supplied by the owner. The units selected are likely to have the greatest probability of containing lead-based paint hazards. A targeted sample is usually selected for performing risk assessments in multifamily housing when it is not possible to select a worst-case sample. See also Worst-case sample and Random sample.

TCLP: See Toxicity Characteristic Leaching Procedure (TCLP).

Tertiary prevention: Providing medical treatment to children with elevated blood lead levels to prevent more serious injury or death.

Testing combination: A unique surface to be tested that is characterized by the room equivalent, component, substrate, and visible color.

Test location: A specific area on a testing combination where XRF instruments will test for lead-based paint.

Toxicity Characteristic Leaching Procedure (TCLP): A laboratory test to determine if excessive levels of lead or other hazardous materials could leach from a sample into groundwater; usually used to determine if waste is hazardous based on its toxicity characteristics.

Trained: Successful completion of a training course in a particular discipline. For lead hazard control work, the training course must be accredited by EPA or by an EPA-approved State program, pursuant to Title IV of the Toxic Substances Control Act.

Transporter: A person who transports hazardous waste, requiring a manifest under 40 CFR Part 260.10, within the United States by air, rail, highway, or water.

Treatment: In residential lead-based paint hazard control work, any method designed to control lead-based paint hazards. Treatment includes interim controls, abatement, and removal. Hazardous waste "treatment" is a method, technique, or process (such as neutralization) that is designed to change the physical, chemical, or biological character or composition of hazardous waste to neutralize it; render it nonhazardous or less hazardous; recover it; make it safer to transport, store, or dispose; or allow for easier recovery, storage, or volume reduction.

Treatment, Storage, and Disposal (TSD) facility: A facility licensed to handle hazardous waste.

Trisodium phosphate (TSP) detergent: A detergent that contains trisodium phosphate.

Trough: See Window trough.

Truck-mounted vacuum unit: A vacuum system whose components, except for hoses and attachments, are located outside the building undergoing dust removal. The exhaust is vented outside so that the interior dust is not disturbed.

TSD: See Treatment, Storage, and Disposal (TSD) facility.

TSP: See Trisodium phosphate (TSP) detergent.

 μ g (or ug): Micrograms. The prefix micromeans 1/1,000,000 (or one-millionth); a microgram is 1/1,000,000 of a gram and 1/1,000 of a milligram; equal to about 35/1,000,000,000 (35 billionths) of an ounce (an ounce is equal to 28,400,000 μ g).





Urethane-modified alkyd: An alkyd molecule that has been chemically modified by the incorporation of a urethane; a coating, often a varnish, that uses a urethane-modified alkyd resin in the binder.

Useful life: The life expectancy of a coating before it requires refinishing or some other form of maintenance.

VOC: See Volatile Organic Compound (VOC).

Volatile Organic Compound (VOC): Substances that vaporize or evaporate from a coating during the coating or curing process.

Walk-off mat: A washable, fibrous material (preferably with a rubber or vinyl backing) positioned at main entryways to reduce transport of lead dust and lead soil into a building or residence.

White lead: A white pigment, usually lead carbonate. See also Lead carbonate.

Window sill: See Interior window sill.

Window stool: See Interior window sill.

Window trough: For a typical double-hung window, the portion of the exterior window sill between the interior window sill (or stool) and the frame of the storm window. If there is no storm window, the window trough is the area that receives both the upper and lower window sashes when they are both lowered. Sometimes inaccurately called the window "well." See also Window well.

Window well: The space that provides exterior access and/or light to a window that is below grade, i.e., below the level of the surrounding earth or pavement. See also Window trough.

Worker: An individual who has completed training in an accredited program to perform lead-based paint hazard control in housing.

Worksite: Any interior or exterior area where lead-based paint hazard control work takes place.

Worksite preparation level: A set of measures designed to protect residents and the environment from leaded dust, paint chips, or other forms of lead contamination through the erection of barriers and the establishment of access control, resident relocation or movement restrictions, warning signs, ventilation, and other measures.

Worst-case sample: A sample of dwelling units having the greatest probability of containing lead-based paint hazards selected by a risk assessor on the basis of a visual examination of all dwelling units in a housing development or apartment building. See also Targeted sample and Random sample.

XRF analyzer: An instrument that determines lead concentration in milligrams per square centimeter (mg/cm²) using the principle of x-ray fluorescence (XRF). Two types of XRF analyzers are used—direct readers and spectrum analyzers. In these *Guidelines*, the term XRF analyzer only refers to portable instruments manufactured to analyze paint, and does not refer to laboratory-grade units or portable instruments designed to analyze soil.

Appendix 4

Inspector Certification



STATE OF CALIFORNIA DEPARTMENT OF PUBLIC HEALTH



LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:

CERTIFICATE TYPE:

NUMBER:

EXPIRATION DATE:

Lead Inspector/Assessor

LRC-00000459

5/31/2025

Lead Project Monitor

LRC-00000458

5/31/2025

Michelle Ehresman

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD

Appendix 5

CDPH 8552 Inspection Form

LEAD HAZARD EVALUATION REPORT

Section 1 — Date of Lead Hazard Evaluation 4/1	1/24					
Section 2 — Type of Lead Hazard Evaluation (Ch	eck one box only)					
✓ Lead Inspection Risk assessment	Clearance Inspection	Ot	ther (specify)			
Section 3 — Structure Where Lead Hazard Evalua	ation Was Conducted					
Address [number, street, apartment (if applicable)]	City		County	Zip Code		
331 The City Drive (Building 9	Orange		Orange	92868		
Construction date (year) of structure Multi-unit building	School or da	School or daycare		Children living in structure? Yes No		
Unknown Single family dwell	ing Other	Other		Don't Know		
Section 4 — Owner of Structure (if business/age	ncy, list contact perso	 1)	<u>.</u>			
Name		T/	elephone number			
c/o Vanir Contruction (Scott Battles)		6	16-677-7024			
Address [number, street, apartment (if applicable)]	City	City		Zip Code		
4540 Duckhorn Drive, Suite 300	Sacramento		CA	95834		
Section 5 — Results of Lead Hazard Evaluation (shock all that apply)					
Section 6 — Individual Conducting Lead Hazard Name Michelle Ehresman Address [number, street, apartment (if applicable)] 7742 Arjons Drive	City San Diego		State CA	Lead containing porcelain s Lead containing door/frame Zip Code 92126		
CDPH certification number LRC 0459	Signature	1		4/26/24		
Name and CDPH certification number of any other individu	als conducting sampling or	testing (if	f applicable)	1720721		
Section 7 — Attachments						
A. A foundation diagram or sketch of the structure inclead-based paint; B. Each testing method, device, and sampling proced. C. All data collected, including quality control data, la	dure used;					
First copy and attachments retained by inspector	Third copy or	ly (no atta	achments) mailed or fax	ed to:		
Second copy and attachments retained by owner	Childhood Le 850 Marina B Richmond, C	California Department of Public Health Childhood Lead Poisoning Prevention Branch Reports 850 Marina Bay Parkway, Building P, Third Floor Richmond, CA 94804-6403 Fax: (510) 620-5656				

Appendix 6

Renovate Right



AUTION CAUTION

CAUTION

CAUTION

CAUTION







1-800-424-LEAD (5323) www.epa.gov/getleadsafe EPA-740-K-10-001 April 2010



Important lead hazard information for families, child care providers and schools.





IT'S THE LAW!

Federal law requires contractors that disturb painted surfaces in homes, child care facilities and schools, built before 1978 to be certified and follow specific work practices to prevent lead contamination. Always ask to see your contractor's certification.

Federal law requires that individuals receive certain information before renovating more than six square feet of painted surfaces in a room for interior projects or more than twenty square feet of painted surfaces for exterior projects or window replacement or demolition in housing, child care facilities and schools built before 1978.

- Homeowners and tenants: renovators must give you this pamphlet before starting work.
- Child care facilities, including preschools and kindergarten classrooms, and the families of children under six years of age that attend those facilities: renovators must provide a copy of this pamphlet to child care facilities and general renovation information to families whose children attend those facilities.



WHO SHOULD READ THIS PAMPHLET?

This pamphlet is for you if you:

- Reside in a home built before 1978.
- Own or operate a child care facility, including preschools and kindergarten classrooms, built before 1978, or
- Have a child under six years of age who attends a child care facility built before 1978.

You will learn:

- Basic facts about lead and your health.
- How to choose a contractor, if you are a property owner.
- What tenants, and parents/guardians of a child in a child care facility or school should consider.
- How to prepare for the renovation or repair job.
- What to look for during the job and after the job is done.
- Where to get more information about lead.

This pamphlet is not for:

- Abatement projects. Abatement is a set of activities aimed specifically at
 eliminating lead or lead hazards. EPA has regulations for certification and training of
 abatement professionals. If your goal is to eliminate lead or lead hazards, contact the
 National Lead Information Center at 1-800-424-LEAD (5323) for more information.
- "Do-it-yourself" projects. If you plan to do renovation work yourself, this document is a good start, but you will need more information to complete the work safely. Call the National Lead Information Center at 1-800-424-LEAD (5323) and ask for more information on how to work safely

in a home with lead-based paint.

Contractor education. Contractors
 who want information about working
 safely with lead should contact
 the National Lead Information
 Center at 1-800-424-LEAD (5323)
 for information about courses and
 resources on lead-safe work practices.



RENOVATING, REPAIRING, OR PAINTING?



- Is your home, your building, or the child care facility or school your children attend being renovated, repaired, or painted?
- Was your home, your building, or the child care facility or school where your children under six years of age attend built before 1978?

If the answer to these questions is YES, there are a few important things you need to know about lead-based paint.

This pamphlet provides basic facts about lead and information about lead safety when work is being done in your home, your building or the child care facility or school your children attend.

The Facts About Lead

- Lead can affect children's brains and developing nervous systems, causing reduced IQ, learning disabilities, and behavioral problems. Lead is also harmful to adults.
- Lead in dust is the most common way people are exposed to lead. People can also get lead in their bodies from lead in soil or paint chips. Lead dust is often invisible.
- Lead-based paint was used in more than 38 million homes until it was banned for residential use in 1978.
- Projects that disturb painted surfaces can create dust and endanger you and your family. Don't let this happen to you. Follow the practices described in this pamphlet to protect you and your family.

LEAD AND YOUR HEALTH

Lead is especially dangerous to children under six years of age.

Lead can affect children's brains and developing nervous systems, causing:

- Reduced IQ and learning disabilities.
- · Behavior problems.

Even children who appear healthy can have dangerous levels of lead in their bodies.

Lead is also harmful to adults. In adults, low levels of lead can pose many dangers, including:

- High blood pressure and hypertension.
- Pregnant women exposed to lead can transfer lead to their fetuses. Lead gets into the body when it is swallowed or inhaled.
- People, especially children, can swallow lead dust as they eat, play, and do other normal hand-to-mouth activities.
- People may also breathe in lead dust or fumes if they disturb lead-based paint.
 People who sand, scrape, burn, brush or blast or otherwise disturb lead-based paint risk unsafe exposure to lead.

What should I do if I am concerned about my family's exposure to lead?

- Call your local health department for advice on reducing and eliminating exposures to lead inside and outside your home, child care facility or school.
- Always use lead-safe work practices when renovation or repair will disturb painted surfaces.
- A blood test is the only way to find out if you or a family member already has lead poisoning. Call your doctor or local health department to arrange for a blood test.

For more information about the health effects of exposure to lead, visit the EPA lead website at www.epa.gov/lead/pubs/leadinfo.htm or call 1-800-424-LEAD (5323).

There are other things you can do to protect your family every day.

- Regularly clean floors, window sills, and other surfaces.
- Wash children's hands, bottles, pacifiers, and toys often.
- Make sure children eat a healthy, nutritious diet consistent with the USDA's dietary guidelines, that helps protect children from the effects of lead.
- Wipe off shoes before entering house.



WHERE DOES THE LEAD COME FROM?

Dust is the main problem.

The most common way to get lead in the body is from dust. Lead dust comes from deteriorating lead-based paint and lead-contaminated soil that gets tracked into your home. This dust may accumulate to unsafe levels. Then, normal hand to-mouth activities, like playing and eating (especially in young children), move that dust from surfaces like floors and window sills into the body.

Home renovation creates dust.

Common renovation activities like sanding, cutting, and demolition can create hazardous lead dust and chips.

Proper work practices protect you from the dust.

The key to protecting yourself and your family during a renovation, repair or painting job is to use lead-safe work practices such as containing dust inside the work area, using dust-minimizing work methods, and conducting a careful cleanup, as described in this pamphlet.

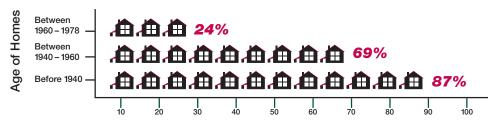
Other sources of lead.

Remember, lead can also come from outside soil, your water, or household items (such as lead-glazed pottery and lead crystal). Contact the National Lead Information Center at 1-800-424-LEAD (5323) for more information on these sources.



CHECKING YOUR HOME FOR LEAD-BASED PAINT

Percentage of Homes Likely to Contain Lead



Older homes, child care facilities, and schools are more likely to contain lead-based paint.

Homes may be single-family homes or apartments. They may be private, government-assisted, or public housing. Schools are preschools and kindergarten classrooms. They may be urban, suburban, or rural.

You have the following options:

You may decide to assume your home, child care facility, or school contains lead. Especially in older homes and buildings, you may simply want to assume lead-based paint is present and follow the lead-safe work practices described in this brochure during the renovation, repair, or painting job.

You can hire a certified professional to check for lead-based paint.

These professionals are certified risk assessors or inspectors, and can determine if your home has lead or lead hazards.

- A certified inspector or risk assessor can conduct an inspection telling you whether your home, or a portion of your home, has lead-based paint and where it is located. This will tell you the areas in your home where lead-safe work practices are needed.
- A certified risk assessor can conduct a risk assessment telling you if your home currently has any lead hazards from lead in paint, dust, or soil. The risk assessor can also tell you what actions to take to address any hazards.
- For help finding a certified risk assessor or inspector, call the National Lead Information Center at 1-800-424-LEAD (5323).

You may also have a certified renovator test the surfaces or components being disturbed for lead using a lead test kit. Test kits must be EPA-recognized and are available at hardware stores. They include detailed instructions for their use.

FOR PROPERTY OWNERS

You have the ultimate responsibility for the safety of your family, tenants, or children in your care.

This means properly preparing for the renovation and keeping persons out of the work area (see p. 8). It also means ensuring the contractor uses lead-safe work practices.

Federal law requires that contractors performing renovation, repair and painting projects that disturb painted surfaces in homes, child care facilities, and schools built before 1978 be certified and follow specific work practices to prevent lead contamination.

Make sure your contractor is certified, and can explain clearly the details of the job and how the contractor will minimize lead hazards during the work.

- You can verify that a contractor is certified by checking EPA's website at epa.gov/getleadsafe or by calling the National Lead Information Center at 1-800-424-LEAD (5323). You can also ask to see a copy of the contractor's firm certification.
- Ask if the contractor is trained to perform lead-safe work practices and to see a copy of their training certificate.
- Ask them what lead-safe methods they will use to set up and perform the job in your home, child care facility or school.
- Ask for references from at least three recent jobs involving homes built before 1978, and speak to each personally.

Always make sure the contract is clear about how the work will be set up, performed, and cleaned.

- Share the results of any previous lead tests with the contractor.
- You should specify in the contract that they follow the work practices described on pages 9 and 10 of this brochure.
- The contract should specify which parts of your home are part of the work area and specify which lead-safe work practices will be used in those areas. Remember, your contractor should confine dust and debris to the work area and should minimize spreading that dust to other areas of the home.
- The contract should also specify that the contractor will clean the work area, verify that it was cleaned adequately, and re-clean it if necessary.

If you think a worker is not doing what he is supposed to do or is doing something that is unsafe, you should:

- Direct the contractor to comply with regulatory and contract requirements.
- Call your local health or building department, or
- Call EPA's hotline 1-800-424-LEAD (5323).

If your property receives housing assistance from HUD (or a state or local agency that uses HUD funds), you must follow the requirements of HUD's Lead-Safe Housing Rule and the ones described in this pamphlet.

FOR TENANTS AND FAMILIES OF CHILDREN UNDER SIX YEARS OF AGE IN CHILD CARE FACILITIES AND SCHOOLS

You play an important role ensuring the ultimate safety of your family.

This means properly preparing for the renovation and staying out of the work area (see p. 8).

Federal law requires that contractors performing renovation, repair and painting projects that disturb painted surfaces in homes built before 1978 and in child care facilities and schools built before 1978, that a child under six years of age visits regularly, to be certified and follow specific work practices to prevent lead contamination.

The law requires anyone hired to renovate, repair, or do painting preparation work on a property built before

1978 to follow the steps described on pages 9 and 10 unless the area where the work will be done contains no lead-based paint.

If you think a worker is not doing what he is supposed to do or is doing something that is unsafe, you should:

- · Contact your landlord.
- · Call your local health or building department, or
- Call EPA's hotline 1-800-424-LEAD (5323).

If you are concerned about lead hazards left behind after the job is over, you can check the work yourself (see page 10).



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PREPARING FOR A RENOVATION

The work areas should not be accessible to occupants while the work occurs.

The rooms or areas where work is being done may need to be blocked off or sealed with plastic sheeting to contain any dust that is generated. Therefore, the contained area may not be available to you until the work in that room or area is complete, cleaned thoroughly, and the containment has been removed. Because you may not have access to some areas during the renovation, you should plan accordingly.

You may need:

- Alternative bedroom, bathroom, and kitchen arrangements if work is occurring in those areas of your home.
- A safe place for pets because they too can be poisoned by lead and can track lead dust into other areas of the home.
- A separate pathway for the contractor from the work area to the outside in order to bring materials in and out of the home. Ideally, it should not be through the same entrance that your family uses.
- A place to store your furniture. All furniture and belongings may have to be moved from the work area while the work is being done. Items that can't be moved, such as cabinets, should be wrapped in plastic.
- To turn off forced-air heating and air conditioning systems while the work is being done. This prevents dust from spreading through vents from the work area to the rest of your home. Consider how this may affect your living arrangements.

You may even want to move out of your home temporarily while all or part of the work is being done.

Child care facilities and schools may want to consider alternative accommodations for children and access to necessary facilities.



DURING THE WORK

Federal law requires contractors that are hired to perform renovation, repair and painting projects in homes, child care facilities, and schools built before 1978 that disturb painted surfaces to be certified and follow specific work practices to prevent lead contamination.

The work practices the contractor must follow include these three simple procedures, described below:

- 1. Contain the work area. The area must be contained so that dust and debris do not escape from that area. Warning signs must be put up and plastic or other impermeable material and tape must be used as appropriate to:
 - Cover the floors and any furniture that cannot be moved.
 - Seal off doors and heating and cooling system vents.

These will help prevent dust or debris from getting outside the work area.

2. Avoid renovation methods that generate large amounts of lead-contaminated dust.

Some methods generate so much lead-contaminated dust that their use is prohibited.

They are:

- · Open flame burning or torching.
- Sanding, grinding, planing, needle gunning, or blasting with power tools and equipment not equipped with a shroud and HEPA vacuum attachment.
- Using a heat gun at temperatures greater than 1100°F.

There is no way to eliminate dust, but some renovation methods make less dust than others. Contractors may choose to use various methods to minimize dust generation, including using water to mist areas before sanding or scraping; scoring paint before separating components; and prying and pulling apart components instead of breaking them.

- **3. Clean up thoroughly.** The work area should be cleaned up daily to keep it as clean as possible. When all the work is done, the area must be cleaned up using special cleaning methods before taking down any plastic that isolates the work area from the rest of the home. The special cleaning methods should include:
 - Using a HEPA vacuum to clean up dust and debris on all surfaces, followed by
 - Wet wiping and wet mopping with plenty of rinse water.

When the final cleaning is done, look around. There should be no dust, paint chips, or debris in the work area. If you see any dust, paint chips, or debris, the area must be re-cleaned.

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FOR PROPERTY OWNERS: AFTER THE WORK IS DONE

When all the work is finished, you will want to know if your home, child care facility, or school has been cleaned up properly. Here are some ways to check.

Ask about your contractor's final cleanup check. Remember, lead dust is often invisible to the naked eye. It may still be present even if you cannot see it. The contractor must use disposable cleaning cloths to wipe the floor of the work area and compare them to a cleaning verification card to determine if the work area was adequately cleaned.

To order a cleaning verification card and detailed instructions visit the EPA lead website at www.epa.gov/lead or contact the National Lead Information Center at 1-800-424-LEAD (5323) or visit their website at www.epa.gov/lead/nlic.htm.

You also may choose to have a lead-dust test. Lead-dust tests are wipe samples sent to a laboratory for analysis.

- You should specify in your contract that a lead-dust test will be done. In this case, make it clear who will do the testing.
- Testing should be done by a lead professional.

If you choose to do the testing, some EPA-recognized lead laboratories will send you a kit that allows you to collect samples and send them back to the lab for analysis.

Contact the National Lead Information Center at 1-800-424-LEAD (5323) for lists of qualified professionals and EPA-recognized lead labs.

If your home, child care facility, or school fails the dust test, the area should be re-cleaned and tested again.

Where the project is done by contract, it is a good idea to specify in the contract that the contractor is responsible for re-cleaning if the home, child care facility, or school fails the test.



FOR ADDITIONAL INFORMATION

You may need additional information on how to protect yourself and your children while a job is going on in your home, your building, or child care facility.

The National Lead Information Center at 1-800-424-LEAD (5323) or www.epa.gov/lead/nlic.htm can tell you how to contact your state, local, and/or tribal programs or get general information about lead poisoning prevention.

- State and tribal lead poisoning prevention or environmental protection programs can provide information about lead regulations
- and potential sources of financial aid for reducing lead hazards. If your state or local government has requirements more stringent than those described in this pamphlet, you must follow those requirements.
- Local building code officials can tell you the regulations that apply to the renovation work that you are planning.
- State, county, and local health departments can provide information about local programs, including assistance for lead-poisoned children and advice on ways to get your home checked for lead.

The National Lead Information Center can also provide a variety of resource materials, including the following guides to lead-safe work practices. Many of these materials are also available at www.epa.gov/lead/pubs/brochure.htm.

- Steps to Lead Safe Renovation, Repair and Painting.
- Protect Your Family from Lead in Your Home
- Lead in Your Home: A Parent's Reference Guide





For the hearing impaired, call the Federal Information Relay Service at 1-800-877-8339 to access any of the phone numbers in this brochure.

10 11

OTHER FEDERAL AGENCIES

EPA Regional Offices

EPA addresses residential lead hazards through several different regulations. EPA requires training and certification for conducting abatement and renovations, education about hazards associated with renovations, disclosure about known lead paint and lead hazards in housing, and sets lead-paint hazard standards.

Your Regional EPA Office can provide further information regarding lead safety and lead protection programs at **epa.gov/lead**.

Region 1

(Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island, Vermont) Regional Lead Contact U.S. EPA Region 1 Suite 1100 One Congress Street Boston, MA 02114-2023 (888) 372-7341

Region 2

(New Jersey, New York, Puerto Rico, Virgin Islands) Regional Lead Contact U.S. EPA Region 2 2890 Woodbridge Avenue Building 205, Mail Stop 225 Edison, NJ 08837-3679 (732) 321-6671

Region 3

(Delaware, Maryland, Pennsylvania, Virginia, Washington, DC, West Virginia) Regional Lead Contact U.S. EPA Region 3 1650 Arch Street Philadelphia, PA 19103-2029 (215) 814-5000

Region 4

(Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee) Regional Lead Contact U.S. EPA Region 4 61 Forsyth Street, SW Atlanta, GA 30303-8960 (404) 562-9900

Region 5

(Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin) Regional Lead Contact U.S. EPA Region 5 77 West Jackson Boulevard Chicago, IL 60604-3507 (312) 886-6003

Region 6

(Arkansas, Louisiana, New Mexico, Oklahoma, Texas) Regional Lead Contact U.S. EPA Region 6 1445 Ross Avenue, 12th Floor Dallas, TX 75202-2733 (214) 665-6444

Region 7

(Iowa, Kansas, Missouri, Nebraska) Regional Lead Contact U.S. EPA Region 7 901 N. 5th Street Kansas City, KS 66101 (913) 551-7003

Region 8

(Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming) Regional Lead Contact U.S. EPA Region 8 1595 Wynkoop Street Denver, CO 80202 (303) 312-6312

Region 9

(Arizona, California, Hawaii, Nevada) Regional Lead Contact U.S. Region 9 75 Hawthorne Street San Francisco, CA 94105 (415) 947-8021

Region 10

(Alaska, Idaho, Oregon, Washington) Regional Lead Contact U.S. EPA Region 10 1200 Sixth Avenue Seattle, WA 98101-1128 (206) 553-1200

CPSC

The Consumer Product Safety
Commission (CPSC) protects the public
from the unreasonable risk of injury or
death from 15,000 types of consumer
products under the agency's jurisdiction.
CPSC warns the public and private
sectors to reduce exposure to lead and
increase consumer awareness. Contact
CPSC for further information regarding
regulations and consumer product safety.

CPSC

4330 East West Highway Bethesda, MD 20814 Hotline 1-(800) 638-2772 www.cpsc.gov

CDC Childhood Lead Poisoning Prevention Branch

The Centers for Disease Control and Prevention (CDC) assists state and local childhood lead poisoning prevention programs to provide a scientific basis for policy decisions, and to ensure that health issues are addressed in decisions about housing and the environment. Contact CDC Childhood Lead Poisoning Prevention Program for additional materials and links on the topic of lead.

CDC Childhood Lead Poisoning Prevention Branch

4770 Buford Highway, MS F-40 Atlanta, GA 30341 (770) 488-3300 www.cdc.gov/nceh/lead

HUD Office of Healthy Homes and Lead Hazard Control

The Department of Housing and Urban Development (HUD) provides funds to state and local governments to develop cost-effective ways to reduce lead-based paint hazards in America's privately-owned low-income housing. In addition, the office enforces the rule on disclosure of known lead paint and lead hazards in housing, and HUD's lead safety regulations in HUD-assisted housing, provides public outreach and technical assistance, and conducts technical studies to help protect children and their families from health and safety hazards in the home. Contact the HUD Office of Healthy Homes and Lead Hazard Control for information on lead regulations, outreach efforts, and lead hazard control research and outreach grant programs.

U.S. Department of Housing and Urban Development

Office of Healthy Homes and Lead Hazard Control 451 Seventh Street, SW, Room 8236 Washington, DC 20410-3000 HUD's Lead Regulations Hotline (202) 402-7698 www.hud.gov/offices/lead/

12 13



SAMPLE PRE-RENOVATION FORM

This sample form may be used by renovation firms to document compliance with the Federal pre-renovation education and renovation, repair, and painting regulations.

Occupant Confirmation Pamphlet Receipt

□ I have received a copy of the lead hazard info potential risk of the lead hazard exposure fro dwelling unit. I received this pamphlet befor	om renovation activity to be performed in my
Printed Name of Owner-occupant	
Signature of Owner-occupant	Signature Date
Renovator's Self Certification Option (for tend Instructions to Renovator: If the lead hazard int signature was not obtainable, you may check t	formation pamphlet was delivered but a tenant
pamphlet to the rental dwelling unit listed b	faith effort to deliver the lead hazard information elow at the date and time indicated and that the of receipt. I further certify that I have left a copy nt.
was unavailable to sign the confirmation of r	ave made a good faith effort to deliver the lead lwelling unit listed below and that the occupant receipt. I further certify that I have left a copy of the door or by (fill in how pamphlet was left).
Printed Name of Person Certifying Delivery	Attempted Delivery Date
Signature of Person Certifying Lead Pamphlet	Delivery
Unit Address	

Note Regarding Mailing Option — As an alternative to delivery in person, you may mail the lead hazard information pamphlet to the owner and/or tenant. Pamphlet must be mailed at least seven days before renovation. Mailing must be documented by a certificate of mailing from the post office.

COMPREHENSIVE ASBESTOS SURVEY REPORT FOR DEMOLITION

PROJECT NAME:

ORANGE COUNTY JUVENILE HALL- BUILDING 10



PROJECT ADDRESS:

331 The City Drive, S. Orange, California 92868

Prepared for:

Mr. Scott L. Battles Vanir Construction Management, Inc 4540 Duckhorn Drive, Suite 300 Sacramento, California 95834

Prepared by:

MTGL, Inc. 7742 Arjons Dr. San Diego, California 92126 858-537-3999

Project Number:

SDPE-24-061.1CT

Report By:

Michelle Ehresman, CAC

CAC Certification Number: 14-5323

CAC Expiration Date: November 19, 20204

Date of Report:

April 18, 2024

Version 1.0

TABLE OF CONTENTS

INTRODUCTIONSection 1
General Information
Project Information
Site/Building Description
Suspect Materials Observed
INVESTIGATION LIMITATIONS & WARRANTYSection 2
ASBESTOS SURVEY METHODOLOGYSection 3
General References
Visual Inspection
Homogeneous Material Classifications
Sampling Procedures
Laboratory Procedures
Method of Analysis
Laboratory Quality Control Program
ASBESTOS SURVEY OBSERVATIONS AND FINDINGS Section 4
Summary
Table 1: Positively Identified Materials that Contain Asbestos (ACM and ACCM) and
Assessment of Material Condition.
Table 2: Materials found to be Negative for Asbestos
General Information
Environmental Protection Agency (EPA)
California Occupational Safety & Health Agency (Cal/OSHA)
National Emission Standards for Hazardous Air Pollutants (NESHAP)
CONCLUSIONS & RECOMMENDATIONS Section 5
APPENDICES Section 6
Appendix 1 – Asbestos Laboratory Results & Chain of Custodies
Appendix 2 – Site Map with Sample Location
Appendix 3 – Photo Documentation
Appendix 4 – Inspector Certifications

SECTION 1 INTRODUCTION

GENERAL INFORMATION

MTGL, Inc. was retained to conduct a survey for suspect asbestos containing materials. The intent of this survey is to pre-determine the presence of EPA/OSHA regulated Asbestos Containing Materials and Asbestos Containing Construction Materials (ACCM) that may need to be addressed prior to scheduled demolition and/or renovation activities.

MTGL's scope of work was limited to the following:

- Review of project drawings.
- Conduct a pre-construction asbestos inspection limited to Client specified locations in accordance with NESHAP Regulations and the collection of bulk samples of suspect ACM.
- Submit samples to a NVLAP accredited laboratory for analysis of asbestos fiber content using polarized-light microscopy.
- Prepare report with material description, sampling locations, analytical results, and recommendations for proper handling/abatement prior to demolition and/or renovation activities.

PROJECT INFORMATION

Survey Requested/Authorized By: Mr. Scott L. Battles

Type of Survey Requested: Limited (Restricted to Client Specified Locations Only)

Destructive Sampling Allowed by Client: Yes

Project Name: ORANGE COUNTY JUVENILE HALL BUILDING 10

Project Address: 331 The City of Orange Dr. S in the city of Orange in the State of California.

Date of Inspection: March 27, 2024 to April 2, 2024

AHERA Certified Building Inspector Name: Darla Beery

AHERA Certified Building Inspector Number: 2023ABCA171101

Additional AHERA Certified Building Inspector Name: Michelle Ehresman

Additional AHERA Certified Building Inspector Number: ABIR0727230010N35227

Local Air District: South Coast Air Quality Management District (Sampling method, lab

qualifications, lab analytical procedures, and lab method of analysis were performed in compliance with Rule 1403 (d)(1)(A) and 40 CFR Part 763 -

Asbestos. requirments)

Laboratory: EMLab P&K, LLC – ID#: 3592262/3600734

9445 Farnham St, Suite 103, San Diego, CA 92123

(866) 888-6653 Fax (623) 780-7695 www.emlab.com

Laboratory Sample Analysis Method: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA

METHOD 600/R-93-116, SOP EM-AS-S-1267)

Sampling Protocols: EPA 40CFR 763.86 Methods

SITE/BUILDING DESCRIPTION

Structure Type: Commercial Facility

Year Built: Unknown

Date of known additions: Unknown

Building Structural Damage (If Anv): None Observed

Approximate Square Feet of Surveyed Area: 25,000

Structure Frame: Wood

If other, describe: None

Structure Foundation: Concrete Slab On Grade

If other, describe: None

Number of Floors: 1

Building Occupied: Yes

SUSPECT MATERIALS OBSERVED

Suspect Materials Observed During the Asbestos Survey Conducted

- Acoustic ceiling tile (12" x12")
- Fissured ceiling tile (2'x4')
- Fiberglass insulation
- Pipe insulation
- Pipe elbow wrap
- Ceramic tile w/mortar (wall)
- Ceramic tile w/mortar (floor)
- Brick
- Concrete Block and Concrete ceiling
- Carpet glue
- Concrete floor
- Asphalt and Concrete Sidewalk
- Exterior concrete wall and Exterior concrete block
- HVAC seam caulk
- Texture coat exterior soffit
- Pipe Insulation Wrap
- Rolled Roofing and Roofing Mastic

Inaccessible Materials Presumed to be Asbestos Content: None

SECTION 2 INVESTIGATION LIMITATIONS & WARRANTY

Per the agreement between The Client and MTGL, Inc., the scope of services was performed as described in this report.

The intent of this survey is to pre-determine the presence of EPA/OSHA regulated asbestos containing building materials that may need to be addressed prior to scheduled demolition and/or renovation activities.

INVESTIGATION LIMITATIONS

MTGL, Inc. did not conduct testing within interstitial wall cavities, ceiling plenums, HVAC ventilation systems or crawlspaces or other locations of the facility, outside of the Client specified areas.

The findings of this report are valid as of the date of the survey and sample collection. Changes in the condition of the property can occur with passage of time, whether they are due to natural processes or the works of man on this or adjacent properties. In addition, changes in the state-of-art technology and/or government codes may occur. Due to such changes, the findings of this report may be invalidated wholly or in part by conditions beyond our control. Due to changes that can occur over time, submittals of this report to Regulatory Agencies may require additional site visits and assessment to document current conditions.

The final assessment of the potential for the existence of hazardous contaminants at the site should be considered a professional opinion based on the data obtained during the investigation and should not be considered a definitive statement that a hazardous contaminant or conditions are, or is not, present in the area of study. These opinions have been derived in accordance with current standards of practice.

This report is intended solely for use by the parties to whom it is addressed. This report is not intended for and may not contain sufficient information for purposes other than qualitative evaluation of asbestos or conditions at the time of our evaluation. Reliance on this report for other purposes or by other parties shall be at the user's sole risk.

WARRANTY

MTGL, Inc. warrants that the findings contained herein have been prepared with the level of care and skill exercised by experienced and knowledgeable environmental consultants who are appropriately licensed or otherwise trained to perform asbestos inspections and assessments pursuant to the scope of work required on this project. MTGL's Asbestos Survey Reports are prepared by trained certified professionals without a conflict of interest in the demolition(s) or renovation project(s) as per the Business and Professions Code 7180 (BP7180).

MTGL, Inc. warrants that the findings contained herein have been prepared in general accordance with accepted professional practices as applied by similar professionals in the community at the time of its preparation. Changes in the state of the art or in applicable regulations cannot be anticipated and have not been addressed in this report.

The survey included inspection of visible and accessible materials. MTGL did not inspect or sample inaccessible areas and did not dismantle any part of the structure to survey inaccessible areas. For the purpose of this warranty, inaccessible is defined as areas that could not be tested (sampled) without destruction of the structure or a portion of the structure. Inaccessible materials that are visible to MTGL's inspectors shall be assumed to be asbestos containing. No other warranty is expressed, or implied.

SECTION 3 ASBESTOS SURVEY METHODOLOGY

GENERAL REFERENCES

The asbestos survey consisted of two major activities: visual inspection and sampling. Although these activities are listed separately, they are integrated tasks.

VISUAL INSPECTION

The visual inspection was performed by an AHERA Certified Building Inspector under the direction of a California Certified Asbestos Consultant. An initial building walkthrough was conducted to determine the presence of suspect materials that were accessible or exposed. Materials that were similar in general appearance were grouped into homogeneous sampling areas.

HOMOGENEOUS MATERIAL CLASSIFICATIONS

A preliminary walkthrough of the building was conducted to determine areas of materials that were visually similar in color, texture, and general appearance and that appeared to have been installed at the same time. Such materials are termed "homogeneous materials" by the EPA. During this walkthrough, the approximate locations of these homogeneous materials were noted. Only materials that were accessible or exposed and suspected to contain asbestos were identified.

Following the EPA protocols, each identified suspect homogeneous material is placed in one of the following EPA classifications:

- Surfacing Materials (spray or trowel applied materials)
- Thermal System Insulation (materials applied to various mechanical systems)
- Miscellaneous Materials (any material which do not fit either of the above categories, such as floor tiles, etc.)

SAMPLING PROCEDURES

Following the walkthrough, the inspector collected selected samples of exposed or accessible materials identified as suspect material. Sampling was limited to accessible materials not involving destruction of walls, other building elements, physical barriers, or the structural integrity of the item being tested.

EPA guidelines were used to determine the sampling protocol. Sampling locations that were chosen to be representative of the homogeneous sampling area. While an effort was made to collect samples randomly, samples were taken preferentially from damaged areas or areas which were the least visible to minimize disturbance of the material.

Samples of surfacing material were collected in general accordance with the EPA random sampling protocol outlined in the EPA publication, "Asbestos in Buildings: Simplified Sampling Scheme for Friable Surfacing Materials" (EPA 560/5-85-030a, October 1985).

Samples of miscellaneous materials were also taken as randomly as possible, while attempting to sample already damaged areas so as to minimize disturbance of the material.

A minimum of three samples were collected of each homogeneous material. Depending on the quantity of homogeneous material, additional samples may be collected to avoid the possibility of false negative results.

LABORATORY PROCEDURES

Method of Analysis

Analysis was performed by visually observing the bulk sample and preparing slides for microscopic examination and identification. The samples were mounted on slides and then analyzed for asbestos (chrysotile, amosite, crocidolite, anthophyllite, and actinolite/tremolite), fibrous non-asbestos constituents (mineral wool, paper, etc.) and nonfibrous constituents. Asbestos was identified by refractive indices, morphology, color, pleochroism, birefringence, extinction characteristics, and signs of elongation. The same characteristics were used to identify the non-asbestos constituents.

The microscopist used a stereoscope to visually estimate relative amounts of each constituent using a stereoscope to determine the volume of each constituent in proportion to the total volume of the sample.

All bulk samples were analyzed by Polarized Light Microscopy (PLM) with dispersion staining as described by the Interim Method of the Determination of Asbestos in Bulk Insulation, Federal Register, 40 CFR Ch. 1 Pt. 763, App. A to Subpart. F, July 1, 1987. This is a standard method of analysis in optical mineralogy and the currently accepted method for the determination of asbestos in bulk samples. A suspect material is immersed in a solution of known refractive index and subjected to illumination by polarized light. The characteristic color displays that result enable mineral identification. It should be noted that some ACM may not be accurately identified or quantified by PLM. As an example, the original fabrication of vinyl floor tiles routinely involved milling of asbestos fibers to extremely small sizes. As a result, these fibers may go undetected under the standard polarized light microscopy method. Transmission Electron Microscopy (TEM) is recommended for a more definitive analysis of these materials. MTGL, Inc. has no control over how the laboratory describes materials or layers of materials being analyzed. Although a minimum of three samples are collected of suspect building materials, first positive stops may be requested of the laboratory and the results of the one positive sample will be reported. All other homogeneous materials will be assumed to be positive for asbestos content.

Laboratory Quality Control Program

MTGL, Inc. only uses laboratories that maintain an in-house quality control program. This program involves blind reanalysis of ten percent of all samples, precision and accuracy controls, and use of standard bulk reference materials.

SECTION 4 ASBESTOS OBSERVATIONS AND FINDINGS

SUMMARY

Table 1: Positively Identified Materials that Contain Asbestos (ACM and ACCM) and Assessment of Material Condition (as of the date the survey was conducted). Laboratory Results can be found in Appendix 1.

Material* Description	Location*	Sample #	Approximate Quantity**	AHERA Rank***	Friability/ Material Type	Damage Category	Quantity of Contamination (If any) **	Asbestos Content
2'x4' Fissured Ceiling Tile	Hallway Ceilings	4, 5	3,850 sf	7	Friable	1	None	<1%-5% Amosite
Pipe Elbow Wrap	Throughout	13, 14, 15	Undetermined as wrap may run behind walls or inside soffits.	7	Friable	1	None	White Wrap None Detect White Fibrous Elbow 12%

*Positively identified ACM and ACCM that are similar in color and texture in other locations throughout the structure and facility shall be considered as asbestos containing until further sampling/analysis determines otherwise. In the event suspect asbestos containing materials are discovered during maintenance, renovation and/or demolition that are not identified in this report, disturbance of the materials should be stopped until further assessment of the material for asbestos content can be conducted.

**MTGL, Inc. is not responsible for actual quantity of the material(s). MTGL recommends bidding contractors measure and calculate quantities for estimated abatement costs and notifications. (sf= square foot; NA= not applicable))

***Each homogeneous area of friable and non-friable asbestos-containing material (ACM) was classified into one of the following seven categories, as specified in EPA's AHERA regulations (40 CFR 763.88):

- (1) Damaged or significantly damaged thermal system insulation ACM.
- (2) Damaged friable surfacing ACM.
- (3) Significantly damaged friable surfacing ACM.
- (4) Damaged or significantly damaged friable miscellaneous ACM.
- (5) ACBM with potential for damage.
- (6) ACBM with potential for significant damage.
- (7) Any remaining friable ACBM or friable suspected ACBM.
- (X) Not applicable (material is non-friable surfacing or miscellaneous material).

The damage categories are defined as follows:

Category 1 - "Undamaged" means the material had no visible damage, or extremely minor damage or surface marring (i.e., a room full of floor tile with only two or three small corners chipped off on the tile).

Category 2 - "Damaged" means the material had visible damage evenly distributed over less than 10% of its surface, or localized over less than 25% of its surface.

Category 3 -"Significantly Damaged" means the material had visible damage that is evenly distributed over 10% or more of its surface, or localized over 25% or more if its surface.

Table 2: Materials found to be Negative for Asbestos (as of the date the survey was conducted). Laboratory results can be found in Appendix 1.

Material* Description	Sample #
12"x12" Acoustic Ceiling Tile (Wall)	1, 2, 4
Fiberglass Insulation	7, 8, 9
Pipe Insulation	10, 11, 12, 56
Ceramic Wall Tile and Mortar	16
Ceramic Floor Tile and Morar	17, 19, 20, 21
Brick	18
Concrete Block (Brick)	22, 23, 24
Concrete Ceiling	25, 26, 27
Carpet Glue	28, 29, 30
Concrete Floor	31, 32, 33
Samples 34, 35, 36, 37 Vo	ided from Report
Asphalt	38, 39, 40
Concrete Sidewalk	41, 42, 43
Exterior Concrete Wall	44, 45, 46
Exterior Concrete Block	47, 48, 49
HVAC Seam Caulk	50, 51, 52
Texture Coat, Exterior Soffit	53, 54, 55
Silver Coated Rolled Roofing	58, 59, 60
Silver Coated Roof Mastic	61, 62, 63

GENERAL INFORMATION

Environmental Protection Agency (EPA)

According to the South Coast Air Quality Management District's Rule 1402paragraph (H)(2)(C), the analysis of composite samples of multi-layered material including, but not limited to, stucco (base and scratch coat) and wall systems is prohibited for the quantification of asbestos content. All separable layers shall be analyzed and reported separately for asbestos content.

These materials are eligible for analyzed using 1,000 Point Count with Gravimetric Reduction methods. Analysis would be conducted per strata and materials found to be greater than 0.1% asbestos are regulated by OSHA and handled as asbestos containing until packaged and stored for disposal. Materials greater than 1% are regulated by EPA/APCD and would require disposal as asbestos containing material.

A material is considered by the EPA and the State of California to be asbestos-containing if at least one sample collected from the area shows asbestos present in an amount greater than one percent (>1%).

California Occupational Safety & Health Agency (Cal/OSHA)

Title 8, California Code of Regulation 1529 defines asbestos-containing construction materials as materials containing greater than one-tenth of one percent (0.1%) asbestos by weight. Under this code, materials containing between 0.1% and 1% asbestos are regulated as other regulated operations. Although operations involving materials containing between 0.1% and 1% asbestos are not considered Class I, II, or III work, several sections of the standard are applicable, including negative exposure assessments and the use of regulated areas.

Laboratory analysis may report materials as "Trace Asbestos". These materials are assumed to be greater than 0.1%. Upon client request, these materials can be analyzed using 1,000 Point Count with Gravimetric Reduction methods. Materials found to be greater than 0.1% asbestos are regulated by OSHA and handled as asbestos containing until packaged and stored for disposal.

Please refer to the laboratory analysis for a more detailed description of the microscopic analysis of these samples.

Asbestos-containing materials (ACM) are regulated by federal, state, and local agencies, which include but may not be limited to the following:

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) requires an inspection for asbestos be done on facilities that are to undergo demolition or renovation work. Materials found to contain asbestos may need to be removed prior to the start of such demolition/renovation work.

NESHAP defines Category I non-friable asbestos-containing materials as gaskets, resilient floor covering, and asphalt roofing products that contain more than one percent asbestos, and Category II non-friable as any materials, except for Category I non-friable, that contain more than one percent asbestos and cannot be reduced to a powder by hand pressure when dry. NESHAP defines a Regulated Asbestos-Containing Material (RACM) as: (a) friable ACM, (b) Category I non-friable that has become friable, (c) Category I non-friable that has or may be subject to sanding, grinding, cutting, or abrading, and (d) Category II non-friable that may or has become friable during demolition or renovation.

SECTION 5 CONCLUSIONS & RECOMMENDATIONS

CONCLUSIONS

On this asbestos survey, materials observed and tested for asbestos were positive for asbestos content.

The 2'x4' fissured ceiling tiles were reported to contain >1% asbestos.

The pipe elbow insulation was reported to contain >1% asbestos.

RECOMMENDATIONS

If during renovation or demolition activities, materials other than the ones discussed in this report are observed, the materials should be tested for asbestos content prior to disturbance.

General

MTGL recommends that all asbestos containing materials be removed prior to any renovation and/or demolition activities, which may impact the materials. A Licensed Abatement Contractor in the State of California should perform the removal activities.

Removal of ACM/ACCM should be conducted in accordance with EPA and OSHA requirements for Federal, State and Local rules and regulations. All asbestos removal should be conducted using wet methods and engineering controls to reduce airborne fiber concentrations. OSHA required personal protective equipment must be used for worker protection.

All activities that may disturb or disrupt asbestos containing material must be conducted in properly demarcated regulated areas using wet removal methods.

Proper decontamination methods must be used by all workers entering and leaving regulated work areas where asbestos containing materials are being removed.

In the event ACM or ACCM materials are observed to be damaged and/or visible contamination is present, isolate the immediate area, turn off HVAC systems. Only properly trained and certified workers may enter the work area to conducted clean-up activities using wet methods.

If renovation and/or demolition activities do not impact the asbestos containing materials, then the materials can be managed in place. Periodic surveillance is recommended. An Operations & Maintenance (O&M) program should be established and conducted by properly trained personnel. Minimum training for each type of material that has been identified should be given as required by Cal/OSHA. Additionally, postings would be required in all publicly accessible areas warning of the potential hazard to satisfy the Proposition 65 & Hazard Communication regulations.

SECTION 6 APPENDICES

APPENDIX 1 ASBESTOS LABORATORY RESULTS & CHAIN OF CUSTODY



Report for:

Mr. Carl Tucker MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126

Eurofins EPK Built Environment Testing, LLC Project: Vanir Const. - OC Juvenile Hall; 331 The City of Orange B10 Regarding:

EML ID: 3592261

Approved by:

Dates of Analysis:

Asbestos PLM: 04-01-2024 to 04-04-2024

EMLab ID: 3592261, Page 1 of 15

Approved Signatory Carlos Rivadeneyra

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267) NVLAP Lab Code 500034-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Date of Sampling: 03-27-2024 Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B10

ASBESTOS PLM REPORT

Total Samples Submitted: 52 **Total Samples Analyzed:** 52 **Total Samples with Layer Asbestos Content > 1%:** 4

Lab ID-Version 1: 17567800-1

Lab ID-Version : 17567801-1

Lab ID-Version 1: 17567802-1

EMLab ID: 3592261, Page 2 of 15

Location: 1. Acoustic Ceiling Tile

Sample Layers	Asbestos Content
Brown Ceiling Tile	ND
White Paint	ND
Composite Non-Asbestos Content:	
	10% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 2, Acoustic Ceiling Tile

	•
Sample Layers	Asbestos Content
Brown Mastic	ND
Brown Ceiling Tile	ND
Gray Fibrous Material	ND
White Paint	ND
Composite Non-Asbestos Content:	80% Cellulose
	10% Glass Fibers
	3% Talc
Sample Composite Homogeneity:	Poor

Location: 3. Acoustic Ceiling Tile

Sample Layers	Asbestos Content
Brown Mastic	ND
Brown Ceiling Tile	ND
White Paint	ND
Composite Non-Asbestos Content:	80% Cellulose 10% Glass Fibers 3% Talc
Sample Composite Homogeneity:	Poor

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

EMLab ID: 3592261, Page 3 of 15

Date of Sampling: 03-27-2024 Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B10

ASBESTOS PLM REPORT

Location: 4, Fissured Ceiling Tile

Location: 4, Fissured Ceiling Tile	Lab ID-Version‡: 1756780	
Sample Layers	Asbestos Content	
Gray Ceiling Tile with White Surface	< 1% Amosite	
Composite Non-Asbestos Content:	20% Glass Fibers	
Sample Composite Homogeneity:	Good	

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Lab ID-Version‡: 17567804-1

Lab ID-Version 1: 17567805-1

Lab ID-Version †: 17567807-1

EMLab ID: 3592261, Page 4 of 15

Client: MTGL, Inc. C/O: Mr. Carl Tucker Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B10

Date of Sampling: 03-27-2024 Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 5, Fissured Ceiling Tile

Sample Layers	Asbestos Content
Gray Ceiling Tile with White Surface	3% Amosite
Composite Non-Asbestos Content:	20% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 6. Fissured Ceiling Tile

Location, 0,1155area cening The	
Sample Layers	Asbestos Content
Gray Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	20% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 7. Fiberglass Insulation

Location: 7, Fiberglass Insulation	Lab ID-Version‡: 17567806-1
Sample Layers	Asbestos Content
Beige Insulation	ND
Composite Non-Asbestos Content:	85% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 8 Fiberglass Insulation

Location. 6, Proci glass Insulation	Lab 1D- Version 4. 1750/00/-1	
Sample Layers	Asbestos Content	
Beige Insulation	ND	
Composite Non-Asbestos Content:	85% Glass Fibers	
Sample Composite Homogeneity:	Good	

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

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(800) 651-4802 www.eurofinsus.com/Built

EMLab ID: 3592261, Page 5 of 15

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B10

Date of Sampling: 03-27-2024 Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 9. Fiberglass Insulation

Location: 9, Fiberglass Insulation	Lab ID-Version‡: 17567808-1
Sample Layers	Asbestos Content
Beige Insulation	ND
Composite Non-Asbestos Content:	85% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 10, Pipe Insulation	Lab ID-Version‡: 17567809-1
Sample Layers	Asbestos Content
White Tape (Mesh)	ND
Beige Insulation	ND
Composite Non-Asbestos Content:	85% Glass Fibers
	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 11, Pipe Insulation	Lab ID-Version‡: 17567810-1
Sample Layers	Asbestos Content
White Tape (Mesh)	ND
Beige Insulation	ND
Composite Non-Asbestos Content:	
	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 12, Pipe Insulation	Lab ID-Version‡: 17567811-1
Sample Layers	Asbestos Content
White Tape (Mesh)	ND
Beige Insulation	ND
Composite Non-Asbestos Content:	85% Glass Fibers
	10% Cellulose
Sample Composite Homogeneity:	Moderate

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Lab ID-Version‡: 17567812-1

Lab ID-Version 1: 17567813-1

Lab ID-Version 1: 17567814-1

Lab ID-Version : 17567815-1

EMLab ID: 3592261, Page 6 of 15

Client: MTGL, Inc. C/O: Mr. Carl Tucker Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B10

Date of Sampling: 03-27-2024 Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 13, Pipe Elbow Wrap

	•
Sample Layers	Asbestos Content
White Wrap	ND
White Fibrous Material	12% Chrysotile
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 14. Pipe Elbow Wrap

Zocation 11,11pc Zhou Wilap	
Sample Layers	Asbestos Content
White Wrap	ND
White Fibrous Material	12% Chrysotile
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 15. Pipe Elbow Wrap

Sample Layers	Asbestos Content
White Wrap	ND
White Fibrous Material	12% Chrysotile
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 16, Tile and Mortar/Wall

	·
Sample Layers	Asbestos Content
Gray Mortar	ND
White Tile	ND
Sample Composite Homogeneity:	Moderate

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Lab ID-Version‡: 17567816-1

EMLab ID: 3592261, Page 7 of 15

Client: MTGL, Inc. C/O: Mr. Carl Tucker Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B10

Date of Sampling: 03-27-2024 Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 17, Tile and Mortar/Floor

Sample Layers	Asbestos Content
Gray Mortar	ND
White Tile	ND
Sample Composite Homogeneity: Moderate	

Location: 18, Brick and Mortar	Lab ID-Version‡: 17567817-1
Sample Layers	Asbestos Content
Green/Black Brick	ND
Sample Composite Homogeneity:	Good

Location: 19. Tile and Mortar/Floor

Location: 19, Tile and Mortar/Floor	Lab ID-Version‡: 17567818-1
Sample Layers	Asbestos Content
Gray Mortar	ND
Green Tile	ND
Sample Composite Homogeneity: Moderate	

Location: 20, Tile and Mortar/Floor	Lab ID-Version‡: 17567819-1
Sample Layers	Asbestos Content
Gray Mortar	ND
Green Tile	ND
Sample Composite Homogeneity: Moderate	

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Lab ID-Version 1: 17567821-1

Lab ID-Version : 17567822-1

Lab ID-Version 1: 17567823-1

EMLab ID: 3592261, Page 8 of 15

Client: MTGL, Inc. C/O: Mr. Carl Tucker Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B10

Date of Sampling: 03-27-2024 Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 21, Tile and Mortar/Floor

Location: 21, Tile and Mortar/Floor	Lab ID-Version‡: 17567820-1
Sample Layers	Asbestos Content
Gray Mortar	ND
Green Tile	ND
Sample Composite Homogeneity: Moderate	

Location: 22. Concrete Block

Location, 22, Concrete Block	
Sample Layers	Asbestos Content
Gray Concrete	ND
White Paint	ND
Sample Composite Homogeneity:	Moderate

Location: 23, Concrete Block

Sample Layers	Asbestos Content
Gray Concrete	ND
White Paint	ND
Sample Composite Homogeneity: Moderate	

Location: 24, Concrete Block

Sample Layers	Asbestos Content
Gray Concrete	ND
White Paint	ND
Sample Composite Homogeneity: Moderate	

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Lab ID-Version‡: 17567824-1

Lab ID-Version †: 17567826-1

EMLab ID: 3592261, Page 9 of 15

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B10

Date of Sampling: 03-27-2024 Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 25, Concrete Ceiling

Sample Layers	Asbestos Content
Gray Concrete	ND
White Skim Coat	ND
White Paint	ND
Sample Composite Homogeneity: Poor	

Location: 26, Concrete Ceiling	Lab ID-Version‡: 17567825-1
Sample Layers	Asbestos Content
Gray Concrete	ND
White Skim Coat	ND
White Paint	ND
Sample Composite Homogeneity: Poor	

Location: 27. Concrete Ceiling

Location: 27, Concrete Cening	Eur 15 (Fision 4: 1750/020 1
Sample Layers	Asbestos Content
White Skim Coat	ND
White Paint	ND
Sample Composite Homogeneity: Moderate	

Location: 28, Carpet Glue	Lab ID-Version‡: 17567827-1
Sample Layers	Asbestos Content
Brown Glue	ND
Composite Non-Asbestos Content:	5% Cellulose
Sample Composite Homogeneity:	Good

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Client: MTGL, Inc. C/O: Mr. Carl Tucker Date of Sampling: 03-27-2024 Re: Vanir Const. - OC Juvenile Hall; 331 The City of Date of Receipt: 03-30-2024 Orange B10 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 29, Carpet Glue Lab ID-Version‡: 17567828-1

Sample Layers	Asbestos Content
Brown Glue	ND
Composite Non-Asbestos Content:	5% Cellulose
Sample Composite Homogeneity:	Good

Location: 30, Carpet Glue Lab ID-Version 1: 17567829-1

Sample Layers	Asbestos Content
Brown Glue	ND
Composite Non-Asbestos Content:	5% Cellulose
Sample Composite Homogeneity:	Good

Location: 31, Concrete Floor Lab ID-Version‡: 17567830-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 32, Concrete Floor Lab ID-Version 1: 17567831-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

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Date of Sampling: 03-27-2024 Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B10

ASBESTOS PLM REPORT

Location: 33, Concrete Floor Lab ID-Version‡: 17567832-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 38, Asphalt Lab ID-Version 1: 17567837-1

Sample Layers	Asbestos Content
Black Asphalt	ND
Sample Composite Homogeneity:	Good

Location: 39, Asphalt Lab ID-Version 1: 17567838-1

Sample Layers	Asbestos Content
Black Asphalt	ND
Sample Composite Homogeneity:	Good

Location: 40, Asphalt Lab ID-Version : 17567839-1

Sample Layers	Asbestos Content
Black Asphalt	ND
Sample Composite Homogeneity:	Good

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Lab ID-Version : 17567842-1

Lab ID-Version 1: 17567843-1

Date of Sampling: 03-27-2024 Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of Orange B10

ASBESTOS PLM REPORT

Location: 41, Concrete Sidewalk Lab ID-Version‡: 17567840-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 42. Concrete Sidewalk

Location: 42, Concrete Sidewalk	Lab ID-Version‡: 17567841-1
Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 43, Concrete Sidewalk

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 44. Ext Concrete Wall

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

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Lab ID-Version : 17567844-1

Lab ID-Version †: 17567845-1

Lab ID-Version : 17567846-1

Client: MTGL, Inc. C/O: Mr. Carl Tucker Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B10

Date of Sampling: 03-27-2024 Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 45, Ext Concrete Wall

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 46. Ext Concrete Wall

Location: 40, Ext Concrete Wan	Lab ID Version 1. 175070 15 1
Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: 47, Ext Concrete Block

Sample Layers	Asbestos Content
Gray Concrete	ND
Beige Paint	ND
Sample Composite Homogeneity:	Moderate

Location: 48. Ext Concrete Block

Location: 48, Ext Concrete Block	Lab ID-Version‡: 17567847-1
Sample Layers	Asbestos Content
Gray Concrete	ND
Beige Paint	ND
Sample Composite Homogeneity: Moderate	

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Client: MTGL, Inc. C/O: Mr. Carl Tucker Date of Sampling: 03-27-2024 Re: Vanir Const. - OC Juvenile Hall; 331 The City of Date of Receipt: 03-30-2024 Orange B10 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 49, Ext Concrete Block Lab ID-Version‡: 17567848-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Beige Paint	ND
Sample Composite Homogeneity:	Moderate

Location: 50, HVAC Seam Caulk Lab ID-Version 1: 17567849-1

Sample Layers	Asbestos Content
White Caulk	ND
Sample Composite Homogeneity:	Good

Location: 51, HVAC Seam Caulk Lab ID-Version 1: 17567850-1

Sample Layers	Asbestos Content
White Caulk	ND
Sample Composite Homogeneity:	Good

Location: 52, HVAC Seam Caulk Lab ID-Version : 17567851-1

Sample Layers	Asbestos Content
White Caulk	ND
Sample Composite Homogeneity:	Good

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Lab ID-Version 1: 17567853-1

Client: MTGL, Inc. C/O: Mr. Carl Tucker Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B10

Date of Sampling: 03-27-2024 Date of Receipt: 03-30-2024 Date of Report: 04-04-2024

ASBESTOS PLM REPORT

Location: 53. Texture Coat Ext Soffit

Location: 53, Texture Coat Ext Soffit	Lab ID-Version‡: 17567852-1
Sample Layers	Asbestos Content
White Texture	ND
Beige Paint	ND
Sample Composite Homogeneity	: Moderate

Location: 54. Texture Coat Ext Soffit

Libertion, c ii, Tenture Cour Line Sollie	
Sample Layers	Asbestos Content
White Texture	ND
Beige Paint	ND
Sample Composite Homogeneity:	Moderate

Location: 55. Texture Coat Ext Soffit

Location: 55, Texture Coat Ext Soffit	Lab ID-Version‡: 17567854-1
Sample Layers	Asbestos Content
White Texture	ND
Beige Paint	ND
Sample Composite Homogeneity:	Moderate

Location: 56 Pine Insulation Wran

Location: 56, Pipe Insulation Wrap	Lab ID-Version‡: 17567855-1
Sample Layers	Asbestos Content
White Tape (Mesh)	ND
Beige Insulation	ND
Composite Non-Asbestos Content:	45% Glass Fibers
_	15% Cellulose
Sample Composite Homogeneity:	Moderate

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Built Environment Testing

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CHAIN OF CUSTODY : eurofins www.eurofinsus.com/Built East: (866) 871-1984 Central: (800) 651-4802 West: (866) 888-6653			t Environme	out Testin	WEATHER None	Fog Rain	Snow Wind Clear					RE	QI			***					
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By submitting this Chain of Custody, you agree to be bound by the terms and conditions set forth at: https://www.eurofinsus.com/environment-testing/built-environment/resources/sampling-guides-and-forms ©COPYRIGHT 2022 EUROFINS EPK BUILT ENVIRONMENT TESTING, LLC



Report for:

Mr. Carl Tucker MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126

Eurofins EPK Built Environment Testing, LLC Project: Vanir Const. - OC Juvenile Hall; 331 The City of Orange B10 Regarding:

EMĹ ID: 3600728

Approved by:

Dates of Analysis: Asbestos PLM: 04-11-2024

Approved Signatory Carlos Rivadeneyra

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267) NVLAP Lab Code 500034-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Eurofins EPK Built Environment Testing, LLC

9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B10

Date of Sampling: 04-02-2024 Date of Receipt: 04-08-2024 Date of Report: 04-11-2024

ASBESTOS PLM REPORT

Total Samples Submitted: 6 **Total Samples Analyzed:** 6

Lab ID-Version 1: 17611048-1

EMLab ID: 3600728, Page 2 of 3

Total Samples with Layer Asbestos Content > 1%: 0

Location: 58, Rolled Roofing

Sample Layers	Asbestos Content
Black Roofing Tar and Felt 2	ND
Black Roofing Tar and Felt	ND
Black Roofing Shingle	ND
Silver Coating (Trace)	ND
Composite Non-Asbestos Content:	15% Glass Fibers
Sample Composite Homogeneity:	Poor

Location: 59, Rolled Roofing	Lab ID-Version‡: 17611049-1
Sample Layers	Asbestos Content
Brown Insulation	ND
Black Roofing Tar and Felt 2	ND
Black Roofing Tar and Felt	ND
Black Roofing Shingle	ND
Silver Coating (Trace)	ND
Composite Non-Asbestos Content:	20% Cellulose
	15% Glass Fibers
Sample Composite Homogeneity:	Poor

Location: 60, Rolled Roofing	Lab ID-Version‡: 17611050-1
Sample Layers	Asbestos Content
Brown Insulation	ND
Black Roofing Tar and Felt 2	ND
Black Roofing Tar and Felt	ND
Black Roofing Shingle	ND
Silver Coating (Trace)	ND
Composite Non-Asbestos Content:	
	15% Glass Fibers
Sample Composite Homogeneity:	Poor

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

 \ddagger A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Eurofins EPK Built Environment Testing, LLC

9445 Farnham Street, Suite 103, San Diego, CA 92123

(800) 651-4802 www.eurofinsus.com/Built

Client: MTGL, Inc. C/O: Mr. Carl Tucker

Re: Vanir Const. - OC Juvenile Hall; 331 The City of

Orange B10

Date of Sampling: 04-02-2024 Date of Receipt: 04-08-2024 Date of Report: 04-11-2024

ASBESTOS PLM REPORT

Location: 61, Roof Mastic

Lab ID-Version‡: 17611051-1

Sample Layers	Asbestos Content
Black Roofing Mastic	ND
Silver Coating (Trace)	ND
Composite Non-Asbestos Content:	2% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 62, Roof Mastic

Lab ID-Version 1: 17611052-1 Asbestos Content

Sample Layers	Asbestos Content
Black Roofing Mastic	ND
Silver Coating (Trace)	ND
Composite Non-Asbestos Content:	2% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 63, Roof Mastic

Lab ID-Version 1: 17611053-1

EMLab ID: 3600728, Page 3 of 3

Sample Layers	Asbestos Content
Black Roofing Mastic	ND
Silver Coating (Trace)	ND
Composite Non-Asbestos Content:	2% Cellulose
Sample Composite Homogeneity:	Moderate

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

 \ddagger A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

CHAIN OF CUSTODY 🔆 eurofins

www.eurofinsus.com/Built

Built Environment Testing

WEATHER Fog Rath Snow Wind Clear

REQU

Non-Culturable

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United States Department of Commerce National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 500034-0

Eurofins EMLab P&K

San Diego, CA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2024-01-01 through 2024-12-31

Effective Dates



For the National Voluntary Laboratory Accreditation Program



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Eurofins EMLab P&K

9445 Farnham St #103 San Diego, CA 92123 Quynh Nguyen Phone: 800-651-4802

Email: quynh.nguyen@et.eurofinsus.com https://www.eurofinsus.com/environment-testing/

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 500034-0

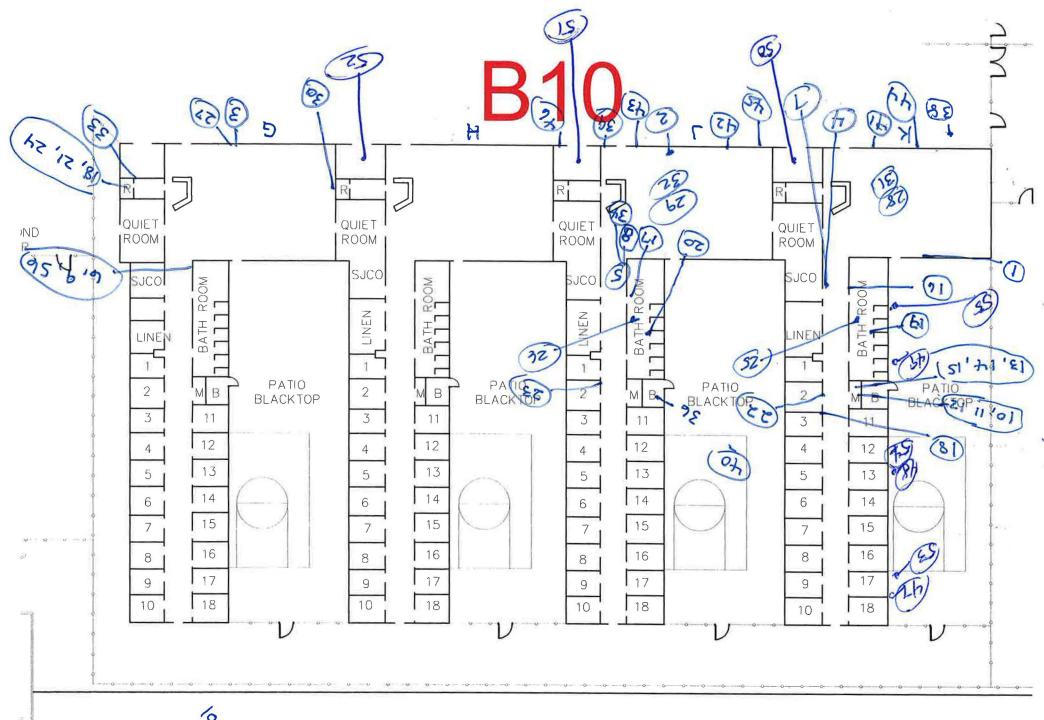
Bulk Asbestos Analysis

<u>Code</u>	<u>Description</u>
18/A01	EPA 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

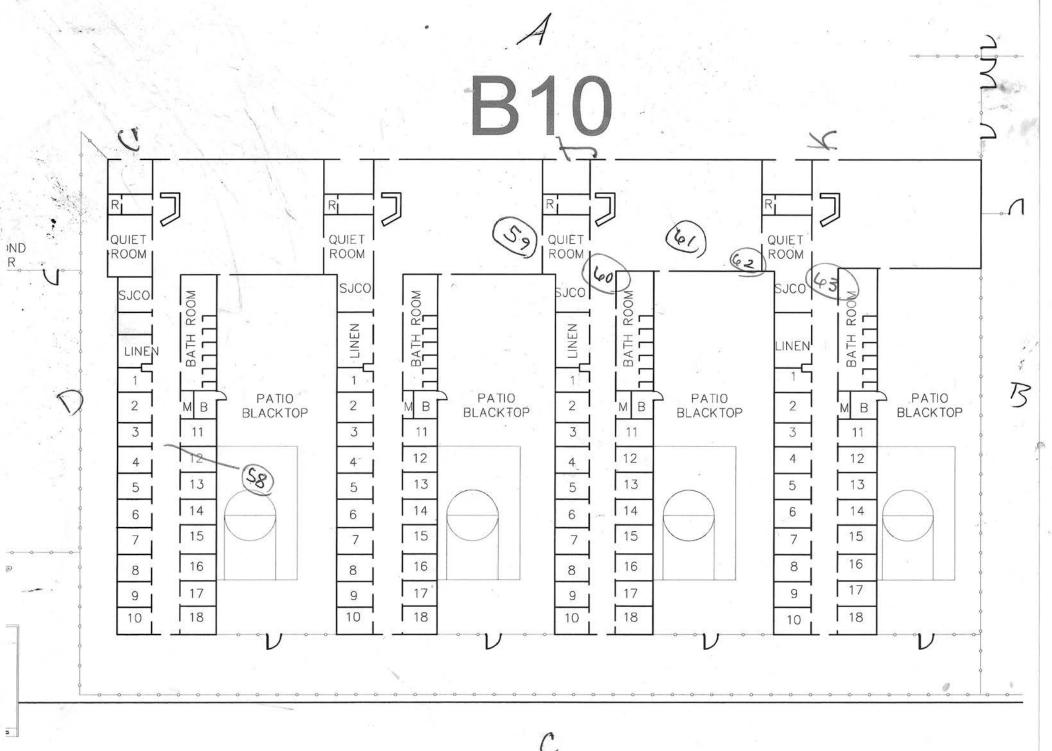
For the National Voluntary Laboratory Accreditation Program

APPENDIX 2

SAMPLE LOCATION MAP (NOT TO SCALE)



10 Pics



APPENDIX 3 PHOTO DOCUMENTATION



1. Typical view of common room. (12"x12" ceiling tiles, concrete block wall, concrete floor and carpeting)



2. Common view of hallway and cells. (2'x4' fissured ceiling tiles)



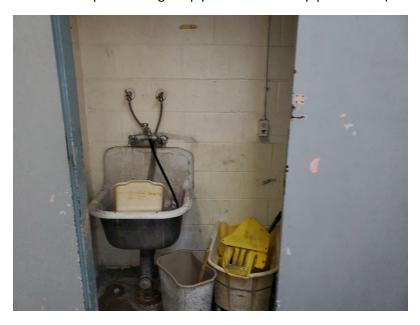
3. Typical view of bathrooms. (Ceramic wall and flooring tiles, concrete ceiling)



4. View inside of hallway pipe chassis.



5. Example of fiberglass pipe run with ACM pipe elbows. (Hallway utility closet)



6. Utility closet.



7. Asphalt.



8. Concrete overhang.

APPENDIX 4 INSPECTOR CERTIFICATIONS

California Certified Asbestos Consultant (CAC)

Card Holder: <u>Michelle Ehresman</u>

Certification Number: <u>14-5323</u> Exp.: <u>11/19/2024</u>

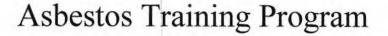
Current Employer: MTGL, Inc.

Supporting Certifications:

AHERA Contractor/Supervisor Refresher Certification
 AHERA Building Inspector Refresher Certification
 AHERA Management Planner Refresher Certification
 AHERA Project Designer Refresher Certification
 Exp. 7/27/2024
 Exp. 7/27/2024
 Exp. 8/16/2024



MTGL, Inc. 7742 Arjons Drive San Diego, CA 92126 858-537-3999



This is to certify

Michelle Ehresman 1656

Has successfully completed 8 hours of formal training required by section 206 of TSCA II entitled

Contractor/Supervisor Refresher

Presented By **Environmental Compliance Training** PO BOX 16555 San Diego, CA. 92176-6555

(858) 558-7465

Director:

Walter T. Amenta, CIH, Approval Number CA-029-04

Class Dates:

06-24-2023

Exam Date:

n/a

Expiration Date: 06-24-2024

Certification Number: 0623ABCA167303

Certificate Of Completion

Asbestos Building Inspector Refresher Course

DOSH #: CA-015-06

Michelle Ehresman

ABIR0727230010N35227

David Wallach

Principal Instructor

7/27/2023

Course Start Date

7/27/2023

Course End Date

Michael W. Horner

Training Director

7/27/2023 Exam Date 7/27/2024

Expiration Date

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



NATEC International, Inc.

National Association of Training and Environmental Consulting



TIONAL 1100 Technology Circle, Suite A, Anaheim, CA 92805 · www.natecintl.com · 800-969-3228

Important Industry Contacts

CAL-OSHA:

Ph# (916) 574-2993

(916) 483-0572 Fax Notification Web: www.dir.ca.gov or calosha.com

CDPH/CLPPB:Ph# (510) 620-5600

Web: www.cdph.ca.gov/programs/CLPPB

SCAQMD:

Ph# (909) 396-3739

Fax#(909) 396-3342

BAAOMD:

Ph# (415) 749-4762

NATEC International, Inc.

National Association of Training and Environmental Consulting

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PO Box 8657, Fountain Valley, CA 92728 (714) 678-2750, (800) 969-3228, Fax (714) 678-2757 www.natecintl.com

NATEC International, Inc.

National Association of Training and Environmental Consulting

This Card Acknowledges That Michelle Ehresman

Holds Training Certification For Asbestos Building Inspector Refresher Course

Expiration: 7/27/2024

ABIR0727230010N35227

Michael W. Horner Training Director

Certificate Of Completion

Asbestos Project Designer Refresher Course

DOSH #:CA-015-10

Michelle Ehresman

APDR0816230004N35415

Norm Kramer

Principal Instructor

8/16/2023 Course Start Date 8/16/2023

Course End Date

8/16/2023

Exam Date

Michael W. Horner

Training Director

8/16/2024

Expiration Date

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



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NATEC International, Inc.

National Association of Training and Environmental Consulting
*Note: Card is not suitable substitute for certificate and is not accepted by SCAQMD as proof of
certification
This Card Askinguidades That

This Card Acknowledges That Michelle Ehresman

Holds Training Certification For Asbestos Project Designer Refresher Course

Expiration: 8/16/2024

Training Date 8/16/2023 APDR0816230004N35415

Michael W. Horner Training Director

Certificate Of Completion

Asbestos Management Planner Refresher Course

DOSH #:CA-015-08

Michelle Ehresman

AMPR0727230007N35357

David Wallach

Principal Instructor

7/27/2023

Course Start Date

7/27/2023

Course End Date

7/27/2023 Exam Date

Training Director

Michael W. Horner

7/27/2024 **Expiration Date**

This course satisfies the education requirements for Asbestos accreditation under the Toxic Substances Control Act, Title II. This course has been approved by the Department of Industrial Relations, Division of Occupational Safety and Health of the State of California



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BAAQMD:

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This Card Acknowledges That Michelle Ehresman

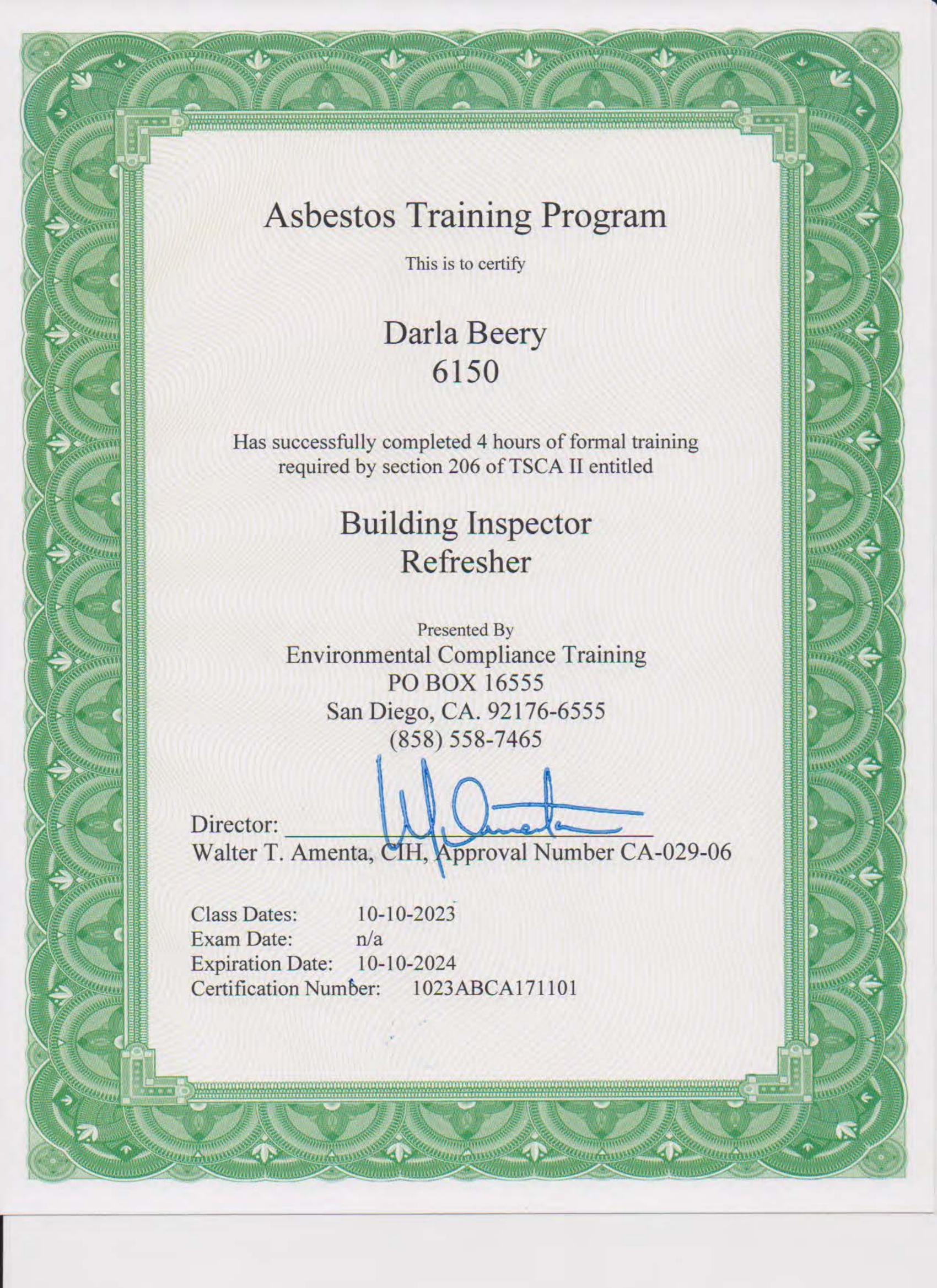
Holds Training Certification For Asbestos Management Planner Refresher Course

Expiration: 7/27/2024

7/27/2023 Training Date AMPR0727230007N35357 Certificate No.

Michael W. Homer Training Director

Darla Beery AHERA Building Inspector Certification



LEAD-BASED PAINT INSPECTION REPORT

Juvenile Hall-Building 10 331 The City Drive, S Orange, California 92868

Prepared for:

Vanir Construction 4540 Duckhorn Drive, Suite 300 Sacramento, California 95834

Prepared by:

MTGL, Inc. 7742 Arjons Drive San Diego, California 92126 858-537-3999

Project Number:

SDPE-24-061.1CT

Michelle Ehresman, CAC, LIA/LPM, ICRA Certification Number: CDPH# 0458/0459

Report Issuance Date: April 27, 2024

TABLE OF CONTENTS

SECTION

INTRODUCTION	1
General Information Authorization Performance	
WARRANTY	2
METHODOLOGY	3
General References Lead Sampling Procedures Performance Characteristic Sheets	
SUMMARY of FINDINGS	4
Lead-Based Paint Summary	
HAZARD CONTROL AND ABATEMENT OPTIONS &LEAD SAFE WORK PRACTICES	5
LEAD BASED PAINT DISCLOSURE	6
APPENDICES	7
Appendix 1 –XRF Data Report and Performance Characteristic Sheet	
Appendix 2 – Site Drawing	
Appendix 3 – Glossary	
Appendix 4 – Inspector Certification	
Appendix 5 – CDPH 8552 Form	
Appendix 6 – Renovate Right	

GENERAL INFORMATION

MTGL was retained by Vanir Construction to conduct a lead-based paint inspection at the subject property located at 331 The City Drive in Orange, California 92868. All inspections were in accordance with the guidelines set forth in the U.S. Department of Housing and Urban Development. This document is prepared for the sole use of Vanir Construction and/or any Regulatory or Governmental agencies that may directly become involved with this project.

MTGL's scope of work was limited to the following Client specified locations at the property:

- Building 10 (Single story, wood frame with concrete block on a concrete slab.)
 - o Quads G, H, J and K

PURPOSE

The purpose of this inspection is to identify and assess painted components at the subject location above specified regulatory action levels within the Client specified scope of work.

AUTHORIZATION

Authorization to perform the survey was given by Mr. Scott Battles with a notice to proceed via proposal SDPE-24-061.1CT.

PERFORMANCE

All visual inspections and component testing was performed in accordance with Federal, State and local requirements. The inspection was performed by Michelle Ehresman, a California Certified Lead Inspector/Assessor on March 27, 2024.

LEAD-BASED PAINT SURVEY

MTGL, Inc. warrants that the findings contained herein have been prepared with the level of care and skill exercised by experienced and knowledgeable environmental consultants who are appropriately licensed or otherwise trained to perform lead-based paint assessments pursuant to the scope of work required on this project.

MTGL, Inc. warrants that the findings contained herein have been prepared in general accordance with accepted professional practices as applied by similar professionals in the community at the time of its preparation. Changes in the state of the art or in applicable regulations cannot be anticipated and have not been addressed in this report.

The survey included the inspection of accessible materials only. MTGL did not inspect or sample inaccessible areas such as behind walls or within ductwork and did not dismantle any part of the structure to survey inaccessible areas. For the purpose of this warranty, inaccessible is defined as areas of the building that could not be tested (sampled) without destruction of the structure or a portion of the structure. Inaccessible materials that are visible to MTGL inspectors shall be assumed to be lead-based paint coated.

It is the owner's legal obligation to disclose the inspection results to tenants and/or purchasers before obligation under 24 CFR part 35 and 40 CFR part 745 (published in the Federal Register, Volume 61, Number 45, March 6, 1996, starting on P. 9064; copies of the regulations and related materials can be obtained from the National Lead Information Center Clearinghouse, (1-800-424-LEAD)

GENERAL REFERENCES

LEAD-BASED PAINT

Lead-based paint testing was conducted in accordance with the Title 17, California Code of Regulations, Division 1, Chapter 8, Accreditation, Certification and Work Practices in Lead-Related Construction, Section 36000 and the United States Department of Housing and Urban Developments *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, Chapter 7 Lead-Based Paint Inspections*, as published in June 1995 and revised in 1997.

The State of California, HUD and the EPA currently define lead-based paint as paints or other surface coatings, which contain lead equal to or greater than 1.0 milligrams of lead per square centimeter of surface area (mg/cm²), or equal to or greater than 0.5% by weight.

Lead-based paint testing was conducted using portable x-ray fluorescence (XRF) spectrum analyzer, Model Niton XLP 300, Manufactured by Niton, Inc. The Niton XLP 300 is calibrated to measure the K-shell x-ray emissions of lead. The K-shell is normally used for paint analysis because it measures lead in all layers of paint films, including the lower layers where higher concentrations of lead are usually found. An initial calibration and ending calibration is validated each day with a laminated Lead Paint Standards testing card which is provided by the manufacturer. The card is a direct comparison to the paint standard to NIST kit SRM2579a with a spectrum analyzer. If an instrument does not maintain consistent calibrations after following the manufacturer's recommendation, the unit is removed from the site and sent back to the manufacturer for service.

In the instance where paint chip samples are collected, sample collections are conducted by the requirements of the American Society of Testing and Materials standard E 1729, Standard Practice for Field Collection of Dried Paint Samples for Lead Determination by Atomic Spectrometry Techniques and HUD Guidelines.

Performance Characteristic Sheet (PCS)

Performance Characteristic Sheets for most XRF models can be found on the U.S. Department of Housing and Urban Developments Office of Healthy Homes and Lead Hazard Control website, specifically HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.(http://www.hud.gov/offices/lead/lbp/hudguidelines/index.cfm).Operating specification and procedures for the XRF used for this survey can be downloaded at the website above. PCS's can also be obtained by calling toll free to the National Lead Information Clearinghouse, at 800-424-LEAD. Persons with hearing or speech impediments may access the above number via TTY by calling the Federal Information Relay Service at 800-887-8339, toll free.

GENERAL SUMMARY

Lead-Based Paint Inspection Results

The purpose of the lead-based paint survey was to evaluate the referenced facility's painted components that may contain lead-based paint. Suspect components identified during the survey included but not limited to the following:

- Interior: Door and Window Components, Wall, Floor and Ceilings
- Exterior: Wall, Windows, and Doors

The following is a summary of lead based painted components identified that contain lead greater than 1.0 mg/cm² or greater * (Please see attachment I for a detail report of findings.)

- No lead-based paint greater than 1.0 mg/cm2 was identified on the components tested.
- Intact lead containing (>1.0 mg/cm2) green ceramic wall, base tile was identified in the staff bathrooms.
- Intact lead containing (>1.0 mg/cm2) green ceramic was identified in the bathrooms.
- Deteriorated lead containing (>1.0 mg/cm2) porcelain sinks were identified in the hallway laundry rooms.

*MTGL, Inc. is not responsible for actual quantity of the material(s). MTGL recommends bidding contractors to calculate quantities for estimated abatement costs. When evaluating this report, it is assumed that according to Chapter 7 HUD guidelines, that if one testing combination (i.e. window, door) is positive for lead in an interior or exterior room equivalent, that all other similar testing combinations in those areas are assumed to be positive.

No lead-based paint was identified on the accessible components tested, however, lead containing, ceramic walls, base tile and white porcelain sinks were identified and Title 8, CCR Section 1532.1 will apply to minimize a lead dust hazard and work protection during demolition.

When evaluating this report, it is assumed that according to Chapter 7 HUD guidelines, that if one testing combination (i.e. window, door) is positive for lead in an interior or exterior room equivalent, that all other similar testing combinations in those areas are assumed to be positive.

Current EPA and Cal/EPA regulations do not require lead-based paint to be removed prior to demolition, unless found to be loose and peeling. Provided that paints are securely adhered to the substrates, deposal of the debris can be handled in California as non-hazardous and non-RCRA waste, pending characterization of the waste.

Loose and peeling paints or other wastes exceeding the Total Threshold Level Concentration (TTLC) of 1,000 ppm ($\mu g/g$) would be required to be disposed of as non-RCRA hazardous waste. However, if the leachable lead contents of the wasted exceed the Soluble Threshold Level Concentrations (STLC) of 5 mg/liter, the wastes must be disposed of as RCRA waste.

Several government agencies have definitions for what amount of lead constitutes paint to be considered "lead-based". The Department of Housing and Urban Development (HUD) has designated the amount to be 1.0 mg/cm^{2,} 0.5% by weight or 5000 ppm (parts per million). The HUD regulations are related to potential hazards in the home environment and not to construction activities. The amount designated for high contact play areas is 400 ppm.

Lead Safe Work Practice Requirements for Maintenance, Renovation or Remodeling

EPA's RRP Rule requires anyone (remodeling, renovation and painting contractors and most other trades) who works in pre-1978 housing for compensation and who might disturb painted surfaces to become an EPA Certified Renovator by taking an 8-hour RRP "Lead Safe Work Practices" class from an EPA accredited training provider. The initial certification is good for five (5) years. To "renew" contractors must take a 4-hour RRP Refresher class before their initial certification expires. The RRP rule applies to anyone who works for compensation in pre-1978 housing and/or child-occupied facilities who might disturb painted surfaces, including:

- General contractors
- Demolition workers
- Remodeling contractors
- Maintenance workers in multi-family housing
- Painters, plumbers and most specialty trades.

The RRP rule covers a lot of jobs: renovation, remodeling, painting, window replacement, plumbing, electrical work, heating & air-conditioning, demolition, plus work performed by trades like carpenters, electricians and handymen. The rule also applies to persons working for rental property owners, schools, and day care providers. And, it applies to non-profits and governmental agencies. The RRP Rule requires that "Lead Safe Work Practices" be used when disturbing more than 6 square feet per room or 20 square feet outside.

It shall be noted that California's lead-based paint regulations cover ALL pre-78 structures that have not been tested - not just Target Housing and Child-Occupied Facilities. (Title 17, CCR, Div 1, Ch 8). Since 2003, California law (Title 17) has required that "Lead Safe Work Practices" be used in ALL pre-1978 structures when disturbing any amount of known or "presumed" lead-based paint. Contractors may have taken additional training to meet State of California requirements for Lead-Related Construction and obtain the required California Department of Public Health-Lead Related Construction Certifications for permanent abatement. This certification supplements but does not replace the EPA RRP certification. CDPH State Certified Lead Abatement Supervisors and Workers must also become RRP certified, and abatement firms must also be RRP Certified if they do non-abatement jobs.

Contractors and renovators who work or compensation in pre-1978 housing and/or a child-occupied facility that will disturb painted surfaces greater than 6 square feet per room or 20 square feet outside must give Clients a pamphlet called "Renovate Right" and get a signed receipt before beginning a job. Contractors can call (800) 424-5323 and ask for free copies of "Renovate Right" and the "Small Entity Compliance Guide to Renovate Right" or both can be downloaded as PDF files from the EPA website.

The Consumer Product Safety Commission (CPSC) has defined lead-based paint as surface coatings containing lead concentrations greater than 90 ppm. All children's products, and some furniture, for adult and children, must not contain a concentration of lead greater than 0.009 percent (90 parts per million) in paint or any similar surface coatings. Household paint must also meet this requirement. In 1978, the CPSC banned the sale of lead-based paint to consumers and the use of lead-based paint in residences and public buildings.

Please note that the detection of any amount of lead in a component will trigger numerous requirements from the California Occupations Safety and Health Administration (Cal-OSHA) lead in construction standard (e.g., Title 8, CCR Section 1532.1), even with common tasks such as drywall demolition, manual paint scraping, and manual paint sanding. The employer is required to conduct air sampling to determine the exposure to lead during these tasks and during other tasks that could result in lead exposure. Until actual exposures are determined, workers are required to wear respirators that are appropriate to the task. Detailed requirements are published in the Cal-OSHA standard for lead in construction.

All workers who may be exposed to lead must be trained in the hazards of lead. The results of air sampling are used to determine if workers are exposed to lead above the action level (AL) of 30 micrograms per cubic meter of air or above the permissible exposure limit (PEL) of 50 micrograms of lead per cubic meter of air, averaged over an 8-hour shift. Exposures above the AL or PEL will trigger additional requirements including engineering controls, proper housekeeping, washing facilities for hand and face washing, additional worker training, respiratory protection, medical monitoring, and additional air sampling. The employer must have a written compliance plan.

Lead Paint

<u>Interim controls which are temporary measures may include the following:</u>

- Paint Film Stabilization: "scrape off the loose and flakey paint and reapply with regular house paint".
- Friction (places that rub) and Impact (places that are bumped or banged) Surface Treatments (Doors, windows, cabinets, floors, etc): treated by covering the surfaces with an abrasion-resistant material, or by repairing to an intact working condition in order to minimize dust.
- Special Cleaning: reduction of lead hazard by cleaning up visible dust by HEPA vacuuming, washing and HEPA vacuuming again.

Interim controls typically last less than 20 years and will require the reevaluation of components on a periodic basis.

As of April 22, 2010, the EPA passed the Renovator, Repair and Paint Rule (RRP) (40 CFR Part 745.90) which states all renovation and painting contractors and other trades who work in pre-1978 housing and who might disturb painted surfaces must become Lead Certified Renovators by taking a one-day course about using "Lead Safe Work Practices" on the job.

Abatement methods which eliminate or put a barrier in front of lead hazards may include the following:

- Encapsulation: covering lead paint with a special liquid or thick coating (not regular paint). Works well on surfaces that are in good condition and should not be used on friction or impact surfaces.
- Enclosure: covering lead paint with a solid, dust-tight barrier that is usually mechanically attached (sheetrock, paneling, drywall).
- Replacement: removal of lead covered components (doors, windows, molding) and replacing with lead free components.
- Removal: recommended when other options may not be feasible; removal of lead paint by means of heat guns, scraping and sanding, power tools, chemical stripping and/or use of abrasives and hydro blasting.

Abatement controls typically last more than 20 years. Abatement methods that will result in the smallest amount of dust generated are preferred. Workers who partake in the above abatement methods should be California State Certified Lead Supervisors and Workers. Clearance sampling after abatement must be conducted by a certified lead-based paint inspector

Lead Safe Work Practice Requirements for Maintenance, Renovation or Remodeling

Lead-based paint, deteriorated paint or lead-based hazards require lead safe work practices. These practices are necessary for regular lead based paint hazard controls, repair, remodeling, renovation or other work activities that may disturb lead based paint above HUD's de minimis levels. HUD describes de minimus levels as follows:

- 20 square feet on exterior surfaces
- 2 square feet in any one interior room or space
- 10% of a type of building component with a small surface area (such as painted windowsills) on interior or exterior surfaces

Workers who may disturb lead-based paint above the de minimis level during repair, renovation or maintenance activities or any other work efforts that disturbs a known or assumed lead-based paint above HUD's de minimis shall be trained in lead safe work practices.

Firms providing abatement services must be certified as an abatement firm by the EPA or the State. Workers conducting abatement must be trained and certified as abatement workers by a training provider accredited by the EPA or State.

SECTION 6 DISCLOSURE

A copy of this summary must be provided to new lessees (tenants) and purchasers of this property under Federal Law (24 CFR part 35 and 40 CFR part 745) before they become obligated under a lease or sales contract. The complete report must also be provided to new purchasers and it must be made available to new tenants. Landlords (lessors) and sellers are also required to distribute an educational pamphlet and include standard warning language in their leases or sales contracts to ensure that parents have the information they need to protect their children from lead-based paint hazards.

It is the owner's legal obligation to disclose the inspection results to tenants and/or purchasers before obligation under 24 CFR part 35 and 40 CFR part 745 (published in the Federal Register, Volume 61, Number 45, March 6, 1996, starting on P. 9064; copies of the regulations and related materials can be obtained from the National Lead Information Center Clearinghouse, (1-800-424-LEAD).

SECTION 7 Appendices

Appendix 1

XRF Data Sheet

and

Performance Characteristic Sheet (PCS)

Lead Based Paint XRF Data Sheet -Positive Locations

Project: Vanir- Juvenile Hall-Building 10, 331 The City Drive, Orange, CA 92868

Inspection Date: March 27, 2024

(EPA Regulated Lead-Based Paint= 1.0 mg/cm²)

(County of Los Angeles= 0.7mg/cm²) (<LOD= Below Limit of Detection)

					Comp	onent								
Sample #	Unit	Side	Location	Test Location	Structure	Member	Paint Condition	Substrate	Color	XRF Reading (mg/cm2)	Classification (pos, neg, inc.)			
1			Calibration						Red NIST	0.9				
2			Calibration						Red NIST	1.0				
3			Calibration						Red NIST	1.0				
4	10-K	D	Restrooms	Wall	Tile		Intact	Ceramic	Green	6.3	Positive			
5	10-K	В	Laundry	Wall	Sink		Poor	Porcelain	White	9.3	Positive			
6	10-K	D	Staff RR	Wall	Tile		Intact	Ceramic	Green	5.0	Positive			
7	10-J	D	Restrooms	Wall	Tile		Intact	Ceramic	Green	4.9	Positive			
8	10-J	В	Laundry	Wall	Sink		Poor	Porcelain	White	7.1	Positive			
9	10-J	D	Staff RR	Wall	Tile		Intact	Ceramic	Green	6.3	Positive			
10	10-G	D	Staff RR	Wall	Tile		Intact	Ceramic	Green	6.5	Positive			
11	10-G	D	Restrooms	Wall	Tile		Intact	Ceramic	Green	7.4	Positive			
12	10-G	В	Laundry	Wall	Sink		Poor	Porcelain	White	40	Positive			
13	10-H	D	Restrooms	Wall	Tile		Intact	Ceramic	Green	4.9	Positive			
14	10-H	В	Laundry	Wall	Sink		Poor	Porcelain	White	7.1	Positive			
15	10-H	D	Staff RR	Wall	Tile		Intact	Ceramic	Green	6.3	Positive			
			Calibration						Red NIST	1.0				
_														

Performance Characteristic Sheet

EFFECTIVE DATE: September 24, 2004 EDITION NO.: 1

MANUFACTURER AND MODEL:

Make: Niton LLC
Tested Model: XLp 300
Source: 109Cd

Note: This PCS is also applicable to the equivalent model variations indicated

below, for the Lead-in-Paint K+L variable reading time mode, in the XLi and

XLp series:

XLi 300A, XLi 301A, XLi 302A and XLi 303A. XLp 300A, XLp 301A, XLp 302A and XLp 303A. XLi 700A, XLi 701A, XLi 702A and XLi 703A. XLp 700A, XLp 701A, XLp 702A, and XLp 703A.

Note: The XLi and XLp versions refer to the shape of the handle part of the instrument. The differences in the model numbers reflect other modes available, in addition to Lead-in-Paint modes. The manufacturer states that specifications for these instruments are identical for the source, detector, and detector electronics relative to the Lead-in-Paint mode.

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

Lead-in-Paint K+L variable reading time mode.

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm² (inclusive)

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm² in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm² film).

If readings are outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instruments into control before XRF testing proceeds.

SUBSTRATE CORRECTION:

For XRF results using Lead-in-Paint K+L variable reading time mode, substrate correction is <u>not</u> needed for: Brick, Concrete, Drywall, Metal, Plaster, and Wood

INCONCLUSIVE RANGE OR THRESHOLD:

K+L MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm²)				
Results not corrected for substrate bias on any	Brick	1.0				
substrate	Concrete	1.0				
	Drywall	1.0				
	Metal	1.0				
	Plaster	1.0				
	Wood	1.0				

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* ("HUD Guidelines"). Performance parameters shown on this sheet are calculated from the EPA/HUD evaluation using archived building components. Testing was conducted in August 2004 on 133 testing combinations. The instruments that were used to perform the testing had new sources; one instrument's was installed in November 2003 with 40 mCi initial strength, and the other's was installed June 2004 with 40 mCi initial strength.

OPERATING PARAMETERS:

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

SUBSTRATE CORRECTION VALUE COMPUTATION:

Substrate correction is not needed for brick, concrete, drywall, metal, plaster or wood when using Lead-in-Paint K+L variable reading time mode, the normal operating mode for these instruments. If substrate correction is desired, refer to Chapter 7 of the HUD Guidelines for guidance on correcting XRF results for substrate bias.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing. Use the K+L variable time mode readings.

Conduct XRF retesting at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below.

Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family housing a result is defined as the average of three readings. In multifamily housing, a result is a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF results.

Compute the average of all ten re-test XRF results.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

TESTING TIMES:

For the Lead-in-Paint K+L variable reading time mode, the instrument continues to read until it is moved away from the testing surface, terminated by the user, or the instrument software indicates the reading is complete. The following table provides testing time information for this testing mode. The times have been adjusted for source decay, normalized to the initial source strengths as noted above. Source strength and type of substrate will affect actual testing times. At the time of testing, the instruments had source strengths of 26.6 and 36.6 mCi.

Testing Times Using K+L Reading Mode (Seconds)							
	All Data			Median for laboratory-measured lead levels (mg/cm²)			
Substrate	25 th Percentile	Median	75 th Percentile	Pb < 0.25	0.25 <u><</u> Pb<1.0	1.0 <u><</u> Pb	
Wood Drywall	4	11	19	11	15	11	
Metal	4	12	18	9	12	14	
Brick Concrete Plaster	8	16	22	15	18	16	

CLASSIFICATION RESULTS:

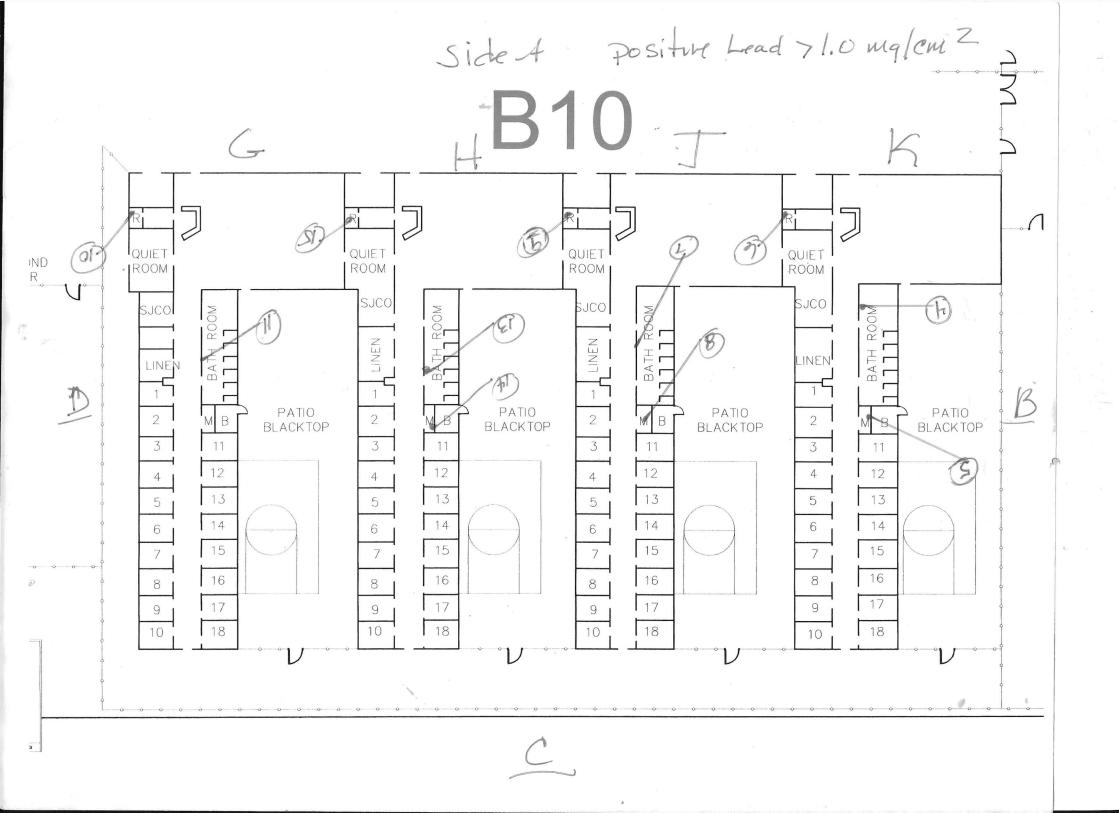
XRF results are classified as positive if they are greater than or equal to the threshold, and negative if they are less than the threshold.

DOCUMENTATION:

A document titled *Methodology for XRF Performance Characteristic Sheets* provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. For a copy of this document call the National Lead Information Center Clearinghouse at 1-800-424-LEAD.

This XRF Performance Characteristic Sheet was developed by the Midwest Research Institute (MRI) and QuanTech, Inc., under a contract between MRI and the XRF manufacturer. HUD has determined that the information provided here is acceptable when used as guidance in conjunction with Chapter 7, Lead-Based Paint Inspection, of HUD's *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*.

APPENDIX 2 SITE DRAWING



Appendix 3

Glossary





Glossary

AALA: American Association for Laboratory Accreditation. Also known as A2LA.

Abatement: A measure or set of measures designed to permanently eliminate lead-based paint hazards or lead-based paint. Abatement strategies include the removal of lead-based paint, enclosure, encapsulation, replacement of building components coated with lead-based paint, removal of lead-contaminated dust, and removal of lead-contaminated soil or overlaying of soil with a durable covering such as asphalt (grass and sod are considered interim control measures). All of these strategies require preparation; cleanup; waste disposal; postabatement clearance testing; recordkeeping; and, if applicable, monitoring. See also Complete abatement and Interim controls.

Abrasion resistance: Resistance of the paint to wear by rubbing or friction; related to both toughness and gloss.

Accessible surface: Any protruding interior or exterior surface, such as an interior window sill, that a young child can mouth or chew.

Accreditation: A formal recognition that an organization, such as a laboratory, is competent to carry out specific tasks or types of tests.

Accredited laboratory: A laboratory that has been evaluated and approved by the National Lead Laboratory Accreditation Program (NLLAP), to perform lead measurement or analysis, usually over a specified period of time.

Accredited training provider: A training provider who meets the standards established by EPA for the training of risk assessors, inspectors, lead-based paint hazard control contractors, and workers.

Accuracy: The degree of agreement between an observed value and an accepted reference value (a "true" value); a data quality indicator. Accuracy includes a combination of random errors (precision) and systematic errors (bias) due to sampling and analysis.

Acrylic: A synthetic resin used in highperformance waterborne coatings; a coating whose binder contains acrylic resins.

Adhesion: The ability of dry paint or other coating to attach to a surface and remain fixed on it without blistering, flaking, cracking, or being susceptible to removal by tape.

Administrative removal: The temporary removal of workers from the job to prevent the concentration of lead in their blood from reaching levels requiring medical removal.

AIHA: American Industrial Hygiene Association.

ALC: See Apparent Lead Concentration.

Aliquot: See Subsample.

Alkali: A chemical, such as Iye, soda, lime, etc., that will neutralize an acid. Oil paint films can be destroyed by alkalies. Some paint removal products contain alkaline substances.

Alkyd: Synthetic resin modified with oil; coating that contains alkyd resins in the binder.

Apparent Lead Concentration (ALC): The x-ray fluorescence (XRF) reading or average of more than one reading on a painted surface. See also XRF analyzer, Substrate Equivalent Lead (SEL), and Corrected Lead Concentration (CLC).

Bare soil: Soil not covered with grass, sod, some other similar vegetation, or paving, including the sand in sandboxes.





Bias: A systematic error in the measurement process. For XRF readings, one source of bias is the substrate effect. See also Substrate effect and XRF analyzer.

Biennial report (for hazardous waste): A report (EPA Form 8700–13A) submitted by generators of hazardous waste to the EPA Regional Administrator. The report is due on March 1 of even-numbered years. The report includes information on the generator's activities during the previous calendar year. The owners and operators of treatment, storage, and disposal facilities must also prepare and submit biennial reports using EPA Form 8700–1313.

Binder: Solid ingredients in a coating that hold the pigment particles in suspension and bind them to the substrate. Binders used in paints and coatings include oil, alkyd, acrylic, latex, and epoxy. The nature and amount of binder determines many of the coating's performance properties—washability, toughness, adhesion, gloss, etc. See also Pigment.

Biological monitoring: The analysis of blood, urine, or both to determine the level of lead contamination in the body. Blood lead levels are expressed in micrograms of lead per deciliter (one-tenth of a liter) of blood, or $\mu g/dL$. They are also expressed in micromoles per liter ($\mu mol/L$).

Blank: A nonexposed sample of the medium being used for testing (i.e., wipe or filter) that is analyzed to determine if the medium has been contaminated with lead (e.g., at the factory or during transport).

Blind sample: A subsample submitted for analysis with a composition and identity known to the submitter but not to the analyst; used to test the analyst's or laboratory's proficiency in conducting measurements. See also Spiked sample.

Blood lead threshold: Any blood lead level greater than or equal to 10 $\mu g/dL$ as defined by the Centers for Disease Control and Prevention. See also Elevated Blood Lead level (EBL) child.

Building component: Any element of a building that may be painted or have dust on its surface, e.g. walls, stair treads, floors, railings, doors, window sills, etc.

Building component replacement: See Replacement.

Cementitious material: A material that is mixed with water, either with or without aggregate, to provide the plasticity, cohesion, and adhesion necessary for the placement and formation of a rigid mass (ASTM Standard C 11).

Centimeter: See cm.

Certification: The process of testing and evaluating against certain specifications the competence of a person, organization, or other entity in performing a function or service, usually for a specified period of time.

Certified: The designation for contractors who have completed training and other requirements to allow them to safely undertake risk assessments, inspections, or abatement work. Risk assessors, inspectors, and abatement contractors should be certified by the appropriate local, State or Federal agency.

Certified Industrial Hygienist (CIH): A person who has passed the 2-day certification exam of the American Board of Industrial Hygiene, and who has at least 4 years of experience in industrial hygiene and a graduate degree or a total of 5 years of experience. See also Industrial hygienist.

Certified reference material (CRM): Reference material that has at least one of its property values established by a technically valid procedure and is accompanied by or traceable to a certificate or other documentation issued by a certifying body. See also Standard reference material.

CFR: See Code of Federal Regulations.

Chalking: The photo-oxidation of paint binders—usually due to weathering—that causes a powder to form on the film surface.





Characteristics (of hazardous waste): EPA has identified four characteristics of hazardous waste: ignitability, corrosivity, reactivity, and toxicity (as determined by the TCLP test). Any solid waste that exhibits at least one of these characteristics may be classified as hazardous under the Resource Conservation and Recovery Act (RCRA), depending on how the waste is produced and what quantities are generated. See also Toxicity Characteristic Leaching Procedure (TCLP).

Chewable surface: See Chewed surface and Accessible surface.

Chewed surface: Any painted surface that shows evidence of having been chewed or mouthed by a young child. A chewed surface is usually a protruding, horizontal part of a building, such as an interior window sill. See also Accessible surface.

CLC: See Corrected Lead Concentration (CLC).

Cleaning: The process of using a HEPA vacuum and wet cleaning agents to remove leaded dust; the process includes the removal of bulk debris from the work area. OSHA prohibits the use of compressed air to clean lead-contaminated dust from a surface.

Clearance examination: Visual examination and collection of environmental samples by an inspector or risk assessor and analysis by an accredited laboratory upon completion of an abatement project, interim control intervention, or maintenance job that disturbs lead-based paint (or paint suspected of being lead-based). The clearance examination is performed to ensure that lead exposure levels do not exceed standards established by the EPA Administrator pursuant to Title IV of the Toxic Substances Control Act, and that any cleaning following such work adequately meets those standards.

Clearance examiner: A person who conducts clearance examinations following lead-based paint hazard control and cleanup work, usually a certified risk assessor or a certified inspector.

cm: Centimeter; 1/100 of a meter.

Code of Federal Regulations (CFR): The codification of the regulations of Federal agencies. The regulations are published in the Federal Register. See also Federal Register (FR).

Cohesion: Ability of a substance to adhere to itself; internal adhesion; the force holding a substance together.

Common area: A room or area that is accessible to all residents in a community (e.g., hallways or lobbies); in general, any area not kept locked.

Competent person: As defined in the OSHA Lead Construction Standard (29 CFR 1926.62), a person who is capable of identifying or predicting hazardous working conditions and work areas, and who has authorization to take prompt, corrective measures to eliminate the hazards. A competent person is not necessarily a risk assessor, inspector, or abatement project supervisor.

Complete abatement: Abatement of all lead-based paint inside and outside a dwelling or building and reduction of any lead-contaminated dust or soil hazards. All of these strategies require preparation; cleanup; waste disposal; postabatement clearance testing; recordkeeping; and, if applicable, reevaluation and on-going monitoring. See also Abatement.

Compliance plan: A document that describes the types of tasks, workers, protective measures, and tools and other materials that may be employed in lead-based paint hazard control to comply with the OSHA Lead Exposure in Construction standard.

Composite sample: A single sample made up of individual subsamples. Analysis of a composite sample produces the arithmetic mean of all subsamples.

Containment: A process to protect workers and the environment by controlling exposures to the lead-contaminated dust and debris created during abatement. See Worksite preparation level.





Contingency plan: A document that describes an organized, planned, and coordinated course of action to be taken during any event that threatens human health or the environment, such as a fire, explosion, or the release of hazardous waste or its constituents from a treatment, storage, or disposal facility.

Corrected Lead Concentration (CLC): The absolute difference between the Apparent Lead Concentration and the Substrate Equivalent Lead. See also Apparent Lead Concentration (ALC) and Substrate Equivalent Lead (SEL).

Detection limit: The minimum amount of a substance that can be reliably measured by a particular method.

Deteriorated lead-based paint: Any lead-based paint coating on a damaged or deteriorated surface or fixture, or any interior or exterior lead-based paint that is peeling, chipping, blistering, flaking, worn, chalking, alligatoring, cracking, or otherwise becoming separated from the substrate.

Digestion blank: A mixture of the reagents used for digesting of paint, soil, or dust matrixes but without the matrix. The blank undergoes all the steps of the analysis, starting with digestion. The blank is used to evaluate the contamination process from a laboratory.

Direct-reading XRF: An analyzer that provides the operator with a display of lead concentrations calculated from the lead K x ray intensity without a graphic of the spectrum usually in mg/cm² (milligrams of lead per square centimeter of painted surface area). See also XRF analyzer.

Disposal (of hazardous waste): The discharge, deposit, injection, dumping, spilling, leaking, or placement of solid or hazardous waste on land or in water so that none of its constituents can pollute the environment by being emitted into the air or discharged into a body of water, including groundwater.

Disposal facility: A facility or part of one in which hazardous waste is placed on land or in water to remain there after the facility closes.

Door mat: See Walk-off mat.

Dust removal: A form of interim control that involves initial cleaning followed by periodic monitoring and recleaning, as needed. Depending on the severity of lead-based paint hazards, dust removal may be the primary activity or just one element of a broader control effort.

Dust trap: A surface, component, or furnishing that serves as a reservoir where dust can accumulate.

EBL child: See Elevated Blood Lead level (EBL) child.

Efflorescence: The salt rising to the surface of a material, such as masonry, plaster, or cement, caused by the movement of water through the material. Paint or encapsulants may not adhere to a surface contaminated with efflorescence.

Elastomeric: A group of pliable, elastic liquid encapsulant coatings. An elastomer is a macromolecular material which, at room temperature, is capable of substantially recovering its size and shape after the force causing its deformation is removed (see ASTM D 907, D-14).

Elevated Blood Lead level (EBL) child: A child who has a blood lead level greater than or equal to 20 μg/dL or a persistent 15 μg/dL. See also Blood lead threshold.

Encapsulation: Any covering or coating that acts as a barrier between lead-based paint and the environment, the durability of which relies on adhesion and the integrity of the existing bonds between multiple layers of paint and between the paint and the substrate. See also Enclosure.

Enclosure: The use of rigid, durable construction materials that are mechanically fastened to the substrate to act as a barrier between the lead-based paint and the environment.





Engineering controls: Measures other than respiratory protection or administrative controls that are implemented at the work site to contain, control, and/or otherwise reduce exposure to lead-contaminated dust and debris usually in the occupational health setting. The measures include process and product substitution, isolation, and ventilation.

Epoxy paint: Paint based on an epoxy resin. An epoxy resin is a cross-linking resin the reactivity of which depends on the epoxide group.

Evaluation: Risk assessment, paint inspection, reevaluation, investigation, clearance examination, or risk assessment screen.

Examination: See Clearance examination.

Examiner: A person certified to conduct clearance examinations or reevaluations, usually a certified inspector or certified risk assessor.

Exposure monitoring: The sampling and analysis of air both inside and outside the work area to determine the degree of worker and resident exposure to lead or other airborne contaminants, often involving air sampling inside a worker's breathing zone.

Exterior work area: For lead hazard control work, the exterior work area includes any exterior building components, such as a porch or stairway; the safety perimeter; and access barriers.

Facility (pertaining to hazardous waste): All buildings, contiguous land, structures, and other appurtenances, as well as any improvements, where lead-based paint or hazardous waste is treated, stored, or disposed. A facility may consist of several different treatment, storage, or disposal units, such as landfills and surface impoundments.

Federal Register (FR): A daily Federal publication that contains proposed and final regulations, rules, and notices.

Fibermat: A semirigid woven material attached with a liquid adhesive to a surface or substrate.

Field blank: A clean sample of the matrix (e.g., filter, or wipe) that has been exposed to the sampling conditions; returned to the laboratory; and analyzed as an environmental sample. Clean quartz sand, air sampling filters and cassettes, and clean wipes can be used as field blanks. The field blank, which should be treated just like the sample, indicates possible sources of contamination.

FR: See Federal Register (FR).

Friction surface: Any interior or exterior surface, such as a window or stair tread, subject to abrasion or friction.

Generator: Any person whose act or operation produces hazardous waste identified or listed in 40 CFR Part 261 or whose act causes a hazardous waste to come under regulation (40 CFR 260.10).

Generator identification number: The unique number assigned by EPA to each generator; transporter of hazardous waste; and treatment, storage, or disposal facility.

Hazardous waste: As defined in EPA regulations (40 CFR 261.3), hazardous waste is solid waste or a combination of solid wastes that because of its quantity; concentration; or physical, chemical, or infectious characteristics may cause or significantly contribute to increases in mortality, serious and irreversible or incapacitating but reversible illnesses, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed. As defined in the regulations, solid waste is hazardous if it meets one of four conditions: (1) exhibits a characteristic of hazardous waste (40 CFR Sections 261.20 through 262.24); (2) has been listed as hazardous (40 CFR Section 261.31 through 261.33); (3) is a mixture containing a listed hazardous waste combined with a nonhazardous solid waste, unless the mixture is specifically excluded or no longer exhibits any of the characteristics of hazardous waste; and (4) is not excluded from regulation as hazardous waste. For lead-based paint abatement





waste, hazardous waste is waste that contains more than 5 ppm of leachable lead as determined by the TCLP test, or is waste that is corrosive, ignitable, or reactive and not otherwise excluded.

Hazardous Waste Manifest: See Manifest.

Heat gun: A device capable of heating leadbased paint causing it to separate from the substrate. For lead hazard control work, the heat stream leaving the gun should not exceed 1,100 °F (some authorities may use a different temperature).

HEPA filter: See High-Efficiency Particulate Air (HEPA) filter.

HEPA/wet wash/HEPA cycle: The cleaning cycle that begins with HEPA vacuuming, followed by a wet wash with a lead-specific cleaning agent, such as trisodium phosphate detergent or another liquid cleaning agent, followed by a final pass with a HEPA vacuum over the surface.

High-Efficiency Particulate Air (HEPA) filter: A filter capable of removing particles of 0.3 microns or larger from air at 99.97 percent or greater efficiency.

High phosphate detergent: See Trisodium phosphate (TSP) detergent.

Impact surface: An interior or exterior surface (such as surfaces on doors) subject to damage by repeated impact or contact.

Incinerator: An enclosed device using controlled flame combustion that neither meets the criteria for classification as a boiler nor is listed as an industrial furnace.

Industrial hygienist: A person having a college or university degree in engineering, chemistry, physics, medicine, or a related physical or biological science who, by virtue of special training, is qualified to anticipate, recognize, evaluate, and control environmental and occupational health hazards and the impact of those hazards on the community and workers.

In-place management: See Interim controls.

Inspection (of paint): A surface-by-surface investigation to determine the presence of lead-based paint (in some cases including dust and soil sampling) and a report of the results.

Inspector: An individual who has completed training from an accredited program and been licensed or certified by the appropriate State or local agency to (1) perform inspections to determine and report the presence of lead-based paint on a surface-by-surface basis through onsite testing, (2) report the findings of such an inspection, (3) collect environmental samples for laboratory analysis, (4) perform clearance testing, and (5) document successful compliance with lead-based paint hazard control requirements or standards.

Interim controls: A set of measures designed to temporarily reduce human exposure or possible exposure to lead-based paint hazards. Such measures include specialized cleaning, repairs, maintenance, painting, temporary containment, and management and resident education programs. Monitoring, conducted by owners, and reevaluations, conducted by professionals, are integral elements of interim control. Interim controls include dust removal; paint film stabilization; treatment of friction and impact surfaces; installation of soil coverings, such as grass or sod; and land-use controls. See also Monitoring, Reevaluation, and Abatement.

Interior window sill: The portion of the horizontal window ledge that protrudes into the interior of the room, adjacent to the window sash when the window is closed; often called the window stool.

Investigation (pertaining to EBL case): The process of determining the source of lead exposure for a child or other resident with an elevated blood lead level. Investigation consists of administration of a questionnaire, comprehensive environmental sampling, case management, and other measures.





Investigator: A person who conducts an investigation of a dwelling where a resident has an elevated blood lead level. The investigator must be proficient in interviewing techniques, environmental sampling, and the interpretation of risk assessment and environmental sampling data.

Laboratory analysis: A determination of the lead content by atomic absorption spectroscopy, inductively coupled plasma emission spectroscopy, or laboratory-based K or L x-ray fluorescence, or an equivalent method.

Landfill: A State-licensed or State-permitted disposal facility that meets municipal solid waste standards (see Federal regulations at 40 CFR 258).

Landfill liner: A continuous layer of natural or synthetic materials placed beneath and sometimes around a surface impoundment, landfill, or landfill cell. The layer restricts the downward or lateral escape of hazardous waste, hazardous waste constituents, or leachate (40 CFR Part 258).

Latex: A waterborne emulsion paint made with synthetic binders, such as 100-percent acrylic, vinyl acrylic, terpolymer, or styrene acrylic; a stable emulsion of polymers and pigment in water.

Lead: Lead includes metallic lead and inorganic and organic compounds of lead.

Lead-based paint: Any paint, varnish, shellac, or other coating that contains lead equal to or greater than 1.0 mg/cm² as measured by XRF or laboratory analysis, or 0.5 percent by weight $(5,000~\mu\text{g/g},\,5,000~\text{ppm},\,\text{or}\,5,000~\text{mg/kg})$ as measured by laboratory analysis. (Local definitions may vary.)

Lead-based paint hazard: A condition in which exposure to lead from lead-contaminated dust, lead-contaminated soil, or deteriorated lead-based paint would have an adverse effect on human health (as established by the EPA Administrator under Title IV of the Toxic Substances Control Act). Lead-based paint hazards

include for example, deteriorated lead-based paint, leaded dust levels above applicable standards, and bare leaded soil above applicable standards.

Lead-based paint hazard control: Activities to control and eliminate lead-based paint hazards, including interim controls, abatement, and complete abatement.

Lead-based paint abatement planner/designer: An individual who has completed an accredited training program on planning and designing lead-based paint abatement projects.

Lead-based paint abatement worker: See Worker.

Lead carbonate: A pigment used in some leadbased paints as a hiding agent; also known as white lead.

Lead-contaminated dust: Surface dust in residences that contains an area or mass concentration of lead in excess of the standard established by the EPA Administrator, pursuant to Title IV of the Toxic Substances Control Act. Until the EPA standards are set, the HUD-recommended clearance and risk assessment standards for leaded dust are 100 $\mu g/ft^2$ on floors, 500 $\mu g/ft^2$ on interior window sills, and 800 $\mu g/ft^2$ on window troughs. The recommended standard for lead hazard screens for floors is 50 $\mu g/ft^2$ and for window troughs is 400 $\mu g/ft^2$.

Lead-contaminated soil: Bare soil on residential property that contains lead in excess of the standard established by the EPA Administrator, pursuant to Title IV of the Toxic Substances Control Act. The HUD-recommended standard and interim EPA guidance is 400 $\mu g/g$ for high-contact play areas and 2,000 $\mu g/g$ in other bare areas of the yard. Soil contaminated with lead at levels greater than or equal to 5,000 $\mu g/g$ should be abated by removal or paving.

Lead-free dwelling: A lead-free dwelling contains no lead-based paint and has interior dust and exterior soil lead levels below the applicable HUD and EPA standards.





Lead hazard screen: A means of determining whether residences in good condition should have a full risk assessment. Also called a risk assessment screen.

Lead-poisoned child: A child with a single blood lead level that is greater than or equal to 20 μ g/dL or consecutive blood lead levels greater than or equal to 15 μ g/dL. Local definitions may vary.

Lead-specific detergent: A cleaning agent manufactured specifically for cleaning and removing leaded dust or other lead contamination.

Leaded dust: See Lead-contaminated dust.

Leaded zinc: A paint primer made from zinc oxide and lead sulfates.

Licensed: Holding a valid license or certification issued by EPA or by an EPA-approved State program pursuant to Title IV of the Toxic Substances Control Act. The license is based on certification for lead-based paint hazard control work. See also Certified.

Listed waste: A hazardous waste that has been placed on one of three lists developed by EPA: nonspecific source wastes, specific source wastes, and commercial chemical products. The lists were developed by examining different types of waste and chemical products to determine if they exhibited one of the four characteristics of hazardous waste (toxicity, corrosivity, ignitability, or reactivity), met the statutory definition of hazardous waste, were acutely toxic or acutely hazardous, or were otherwise toxic.

Maintenance: Work intended to maintain adequate living conditions in a dwelling, which has the potential to disturb lead-based paint or paint that is suspected of being lead-based.

Manifest: The shipping document (EPA Form 8700–22 or a comparable form required by the State or locality) used for identifying the quantity, composition, origin, routing, and destination of hazardous waste during its transport

from the point of generation to the point of treatment, storage, or disposal. Also, a shipping document used to keep track of items being transported. All hazardous waste must be accompanied by a manifest. See Hazardous waste.

Mat: See Walk-off mat.

Matrix blank: A sample of the matrix (paint chips, soil, or dust) that does not contain the analyte lead. This sample goes through the complete analysis, including digestion.

MDL: See Method detection limit (MDL).

Mean: The arithmetic average of a series of numerical data values; for example, the algebraic sum of the data values divided by the number of data values.

Medical removal: The temporary removal of workers from the job because of the occurrence of elevated blood lead levels as defined in the OSHA Lead Exposure in Construction standard (29 CFR 1926.62).

Method blank: See Digestion blank.

Method detection limit (MDL): The minimum concentration of an analyte that, for a given matrix and method, has a 99-percent probability of being identified, qualitatively or quantitatively measured, and reported to be greater than zero.

mg: Milligram; 1/1,000 of a gram.

Microgram: See µg.

Mil: 1/1,000 of an inch; used to measure thickness.

Milligram: See mg.

Monitoring: Surveillance to determine (1) that known or suspected lead-based paint is not deteriorating, (2) that lead-based paint hazard controls, such as paint stabilization, enclosure, or encapsulation have not failed, (3) that structural problems do not threaten the integrity of hazard controls or of known or suspected





lead-based paint, and (4) that dust lead levels have not risen above applicable standards. There are two types of monitoring activities; visual surveys by property owners and reevaluations by certified risk assessors. Visual surveys are generally conducted annually for the purpose of making the first three determinations listed above. Reevaluations are conducted in accordance with the Standard Reevaluation Schedule (or more frequently, if needed) for the purpose of making all four determinations. Monitoring is not required in properties known to be free of lead-based paint. See also Reevaluation and Standard reevaluation schedule.

Monofil: A State-approved landfill that accepts only construction debris.

Mouthable surface: See Chewed surface.

Multifamily housing: Housing that contains more than one dwelling unit per location.

NLLAP requirements: Requirements, specified by the EPA National Lead Laboratory Accreditation Program (NLLAP), for accreditation for the lead analysis of paint, soil, and dust matrixes by an EPA-recognized laboratory accreditation organization.

Offsite paint removal: The process of removing a component from a building and stripping the paint from the component at an offsite paint-stripping facility.

Ongoing monitoring: See Monitoring.

Owner: A person, firm, corporation, guardian, conservator, receiver, trustee, executor, government agency or entity, or other judicial officer who, alone or with others, owns, holds, or controls the freehold or leasehold title or part of the title to property, with or without actually possessing it. This definition includes a vendee who possesses the title, but does not include a mortgagee or an owner of a reversionary interest under a ground rent lease.

Oxidation: A chemical reaction that occurs upon exposure to oxygen. Some coatings cure by oxidation; oxygen enters the liquid coating and crosslinks (attaches) the resin molecules. This film-forming method is also called "air cure" or "air dry." Oxidation also causes rust to form on metals and paint to chalk.

Paint film stabilization: The process of wet scraping, priming, and repainting surfaces coated with deteriorated lead-based paint; paint film stabilization includes cleanup and clearance.

Paint removal: An abatement strategy that entails the removal of lead-based paint from surfaces. For lead hazard control work, this can mean using chemicals, heat guns below 1,100 °F, and certain *contained* abrasive methods. Open flame burning, open abrasive blasting, sandblasting, water blasting, and extensive dry scraping are prohibited paint removal methods. (Methylene chloride paint removers and dry scraping are also not recommended.)

Patch test: A test method or procedure to assess the adhesion of an encapsulant coating to a substrate covered with a layer or layers of lead-based paint.

Personal breathing zone samples: Air samples collected from the breathing zone of a worker (within a 1-foot radius of the worker's mouth) but outside the respirator. The samples are collected with a personal sampling pump operating at 2 liters per minute, drawing air through a 37 mm mixed cellulose ester filter housed in a closed-face cassette with a pore size of 0.8 microns. See Exposure monitoring.

Personal Protective Equipment (PPE): Equipment for protecting the eyes, face, head, and/or extremities; includes protective clothing, respiratory devices, and protective shields; used when hazards capable of causing bodily injury or impairment are encountered.





PHA: See Public Housing Agency (PHA).

Pigment: Insoluble, finely ground materials that give paint its properties of color and hide.

Pigment Volume Concentration (PVC): Pigment volume as a percentage of the total non-volatile ingredients.

Pilot project: In multifamily housing, the testing of a lead-based paint hazard control strategy on a limited number of dwellings, usually those that are vacant, to determine the feasibility of carrying out such a strategy in the entire multifamily housing development; usually involves paint testing, air sampling, wipe sampling, worksite preparation, and a variety of lead-based paint hazard control treatments.

Plastic: See Polyethylene plastic.

Polyethylene plastic: All references to polyethylene plastic refer to 6-mil plastic sheeting or polyethylene bags (or doubled bags if using 4-mil polyethylene bags), or any other thick plastic material shown to demonstrate at least equivalent performance. Plastic used to contain waste should be capable of completely containing the waste and, after being properly sealed, should remain leak-tight with no visible signs of discharge during movement or relocation.

Polyurethane: An exceptionally hard and wear-resistant coating created by the reaction of polyols with a multifunctional isocyanate; often used to seal wood floors following lead-based paint hazard control work and cleaning.

Precision: The degree to which a set of observations or measurements of the same property, usually obtained under similar conditions, conform to themselves; a data quality indicator. Precision is usually expressed in either absolute or relative terms as standard deviation, variance, or range. Often known as "reproducibility."

Primary prevention: The process of controlling lead hazards to prevent exposure *before* a child is poisoned. See Secondary prevention and Tertiary prevention.

Primary standard: A substance or device with a property or value that is unquestionably accepted, within specified limits, in establishing the value of the same or related property of another substance or device.

Public Housing Agency (PHA): Any State, county, municipality, or other government entity or public body, or agency or instrumentality thereof, authorized to engage or assist in the development or operation of housing for low-income families.

PVC: See Pigment Volume Concentration (PVC).

Quality Assurance (QA): An integrated system of activities involving planning, quality control, quality assessment, reporting, and quality improvement to ensure that a product or service meets defined standards of quality within a stated level of confidence.

Quality Control (QC): The overall system of technical activities whose purpose is to measure and control the quality of a product or service so that it meets the needs of users. The aim is to provide a level of quality that is satisfactory, adequate, dependable, and economical.

Random sample: A sample drawn from a population in a way that allows each member of the population to have an equal chance of being selected. Random sampling is a process used to identify locations for the lead-based paint inspections in multifamily dwellings. See also Targeted sample and Worst-case sample.

RCRA: See Resource Conservation and Recovery Act (RCRA).

Reevaluation: In lead hazard control work, the combination of a visual assessment and collection of environmental samples performed by a certified risk assessor to determine if a previously implemented lead-based paint hazard control measure is still effective and if the dwelling remains lead-safe.





Reference material: A material or substance that has at least one sufficiently well established property that can be used to calibrate an apparatus, assess a measurement method, or assign values to materials.

Reinspection: See Reevaluation.

Removal: See Paint removal.

Renovation: Work that involves construction and/or home or building improvement measures such as window replacement, weatherization, remodeling, and repainting.

Replacement: A strategy of abatement that entails the removal of building components coated with lead-based paint (such as windows, doors, and trim) and the installation of new components free of lead-based paint.

Representative sample: A sample of a universe or whole (e.g., waste sample pile, lagoon, groundwater, or waste stream) that can be expected to exhibit the average properties of the entire universe or whole.

Resident: A person who lives in a dwelling.

Resource Conservation and Recovery Act (RCRA): The primary Federal statute governing waste management from generation to disposal. RCRA defines the criteria for hazardous and nonhazardous waste.

Risk assessment: An onsite investigation of a residential dwelling to discover any lead-based paint hazards. Risk assessments include an investigation of the age, history, management, and maintenance of the dwelling, and the number of children under age 6 and women of childbearing age who are residents; a visual assessment; limited environmental sampling (i.e., collection of dust wipe samples, soil samples, and deteriorated paint samples); and preparation of a report identifying acceptable abatement and interim control strategies based on specific conditions.

Risk assessment screen: A type of risk assessment performed only in buildings in good condition using fewer samples but more stringent evaluation criteria (standards) to determine lead hazards.

Risk assessor: A certified individual who has completed training with an accredited training program and who has been certified to (1) perform risk assessments, (2) identify acceptable abatement and interim control strategies for reducing identified lead-based paint hazards, (3) perform clearance testing and reevaluations, and (4) document the successful completion of lead-based paint hazard control activities.

Sample site: A specific spot on a surface being tested for lead concentration.

Saponification: The chemical reaction between alkalies and oil that produces a type of soap. Because of saponification, oil and alkyd coatings will not adhere to masonry substrates, galvanized metals, or zinc-rich primers. Also a form of incompatibility between types of coatings.

Screen: See Risk assessment screen or Lead hazard screen.

Screening: The process of testing children to determine if they have elevated blood lead levels.

Secondary prevention: The process of identifying children who have elevated blood lead levels through screening and controlling or eliminating the sources of further exposure. See also Primary prevention and Tertiary prevention.

SEL: See Substrate Equivalent Lead (SEL).

Site: The land or body of water where a facility is located or an activity is conducted. The site includes adjacent land used in connection with the facility or activity.





Small-quantity generator: Owners, contractors (generators), or both who produce less than 100 kg of hazardous waste per month and accumulate less than 100 kg of hazardous waste at any one time, or who produce less than 1 kg of acutely hazardous waste per month and accumulate less than 1 kg of acutely hazardous waste at any one time.

Soil: See Bare soil.

Solid waste: As defined by RCRA, the term solid waste means garbage; refuse; sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility; or other discarded materials, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations or from community activities. The term does not include solid or dissolved material in domestic sewage or solid or dissolved material in irrigation return flows or industrial discharges (which are point sources subject to permits under the Clean Water Act), nor does the term include special nuclear or byproduct material as defined by the Atomic Energy Act of 1954.

Spectrum analyzer: A type of XRF analyzer that provides the operator with a plot of the energy and intensity, or counts of both K and L x-ray spectra, as well as a calculated lead concentration. See also XRF analyzer.

Spiked matrix: See Spiked sample.

Spiked sample: A sample prepared by adding a known mass of the target analyte (e.g., leaded dust) to a specific amount of matrix sample (e.g., one dust wipe) for which an independent estimate of the target analyte concentration is available. Spiked samples are used to determine, for example, the effect of the matrix on a method's recovery efficiency. See also Blind sample.

Spot-prime: To apply a paint primer to localized areas of exposed substrate.

Standard deviation: A measure of the precision of a reading; the spread of the deviation from the mean. The smaller the standard deviation, the more precise the analysis. The standard deviation is calculated by first obtaining the mean, or the arithmetic average, of all of the readings. A formula is then used to calculate how much the individual values vary from the mean—the standard deviation is the square root of the arithmetic average of the squares of the deviation from the mean. Many hand calculators have an automatic standard deviation function. See also Mean.

Standard reevaluation schedule (SRS): A schedule that determines the frequency that reevaluations should be performed on a property.

Standard reference material (SRM): A certified reference material produced by the National Institute of Standards and Technology (U.S. Department of Commerce) and characterized for absolute content independent of analytical method. See also Certified reference material.

Subsample: A representative portion of a sample. A subsample may be either a field sample or a laboratory sample. A subsample is often combined with other subsamples to produce a composite sample. See also Composite sample.

Substrate: A surface on which paint, varnish, or other coating has been applied or may be applied. Examples of substrates include wood, plaster, metal, and drywall.

Substrate effect: The radiation returned to an XRF analyzer by the paint, substrate, or underlying material, in addition to the radiation returned by any lead present. This radiation, when counted as lead x-rays by an XRF analyzer contributes to substrate equivalent lead (bias). The inspector may have to compensate for this effect when using XRF analyzers. See also XRF analyzer.





Substrate Equivalent Lead (SEL): The XRF measurement taken on an unpainted surface; used to calculate the corrected lead concentration on a surface by using the following formula: Apparent Lead Concentration—Substrate Equivalent Lead = Corrected Lead Concentration. See also Apparent Lead Concentration (ALC), Corrected Lead Concentration (CLC), and XRF analyzer.

Target housing: Any residential unit constructed before 1978, except dwellings that do not contain bedrooms or dwellings that were developed specifically for the elderly or persons with disabilities—unless a child younger than 6 resides or is expected to reside in the dwelling. In the case of jurisdictions that banned the sale or use of lead-based paint before 1978, the Secretary of HUD may designate an earlier date for defining target housing.

Targeted sample: A sample of dwelling units selected from an apartment building or housing development using information supplied by the owner. The units selected are likely to have the greatest probability of containing lead-based paint hazards. A targeted sample is usually selected for performing risk assessments in multifamily housing when it is not possible to select a worst-case sample. See also Worst-case sample and Random sample.

TCLP: See Toxicity Characteristic Leaching Procedure (TCLP).

Tertiary prevention: Providing medical treatment to children with elevated blood lead levels to prevent more serious injury or death.

Testing combination: A unique surface to be tested that is characterized by the room equivalent, component, substrate, and visible color.

Test location: A specific area on a testing combination where XRF instruments will test for lead-based paint.

Toxicity Characteristic Leaching Procedure (TCLP): A laboratory test to determine if excessive levels of lead or other hazardous materials could leach from a sample into groundwater; usually used to determine if waste is hazardous based on its toxicity characteristics.

Trained: Successful completion of a training course in a particular discipline. For lead hazard control work, the training course must be accredited by EPA or by an EPA-approved State program, pursuant to Title IV of the Toxic Substances Control Act.

Transporter: A person who transports hazardous waste, requiring a manifest under 40 CFR Part 260.10, within the United States by air, rail, highway, or water.

Treatment: In residential lead-based paint hazard control work, any method designed to control lead-based paint hazards. Treatment includes interim controls, abatement, and removal. Hazardous waste "treatment" is a method, technique, or process (such as neutralization) that is designed to change the physical, chemical, or biological character or composition of hazardous waste to neutralize it; render it nonhazardous or less hazardous; recover it; make it safer to transport, store, or dispose; or allow for easier recovery, storage, or volume reduction.

Treatment, Storage, and Disposal (TSD) facility: A facility licensed to handle hazardous waste.

Trisodium phosphate (TSP) detergent: A detergent that contains trisodium phosphate.

Trough: See Window trough.

Truck-mounted vacuum unit: A vacuum system whose components, except for hoses and attachments, are located outside the building undergoing dust removal. The exhaust is vented outside so that the interior dust is not disturbed.

TSD: See Treatment, Storage, and Disposal (TSD) facility.

TSP: See Trisodium phosphate (TSP) detergent.

 μ g (or ug): Micrograms. The prefix micromeans 1/1,000,000 (or one-millionth); a microgram is 1/1,000,000 of a gram and 1/1,000 of a milligram; equal to about 35/1,000,000,000 (35 billionths) of an ounce (an ounce is equal to 28,400,000 μ g).





Urethane-modified alkyd: An alkyd molecule that has been chemically modified by the incorporation of a urethane; a coating, often a varnish, that uses a urethane-modified alkyd resin in the binder.

Useful life: The life expectancy of a coating before it requires refinishing or some other form of maintenance.

VOC: See Volatile Organic Compound (VOC).

Volatile Organic Compound (VOC): Substances that vaporize or evaporate from a coating during the coating or curing process.

Walk-off mat: A washable, fibrous material (preferably with a rubber or vinyl backing) positioned at main entryways to reduce transport of lead dust and lead soil into a building or residence.

White lead: A white pigment, usually lead carbonate. See also Lead carbonate.

Window sill: See Interior window sill.

Window stool: See Interior window sill.

Window trough: For a typical double-hung window, the portion of the exterior window sill between the interior window sill (or stool) and the frame of the storm window. If there is no storm window, the window trough is the area that receives both the upper and lower window sashes when they are both lowered. Sometimes inaccurately called the window "well." See also Window well.

Window well: The space that provides exterior access and/or light to a window that is below grade, i.e., below the level of the surrounding earth or pavement. See also Window trough.

Worker: An individual who has completed training in an accredited program to perform lead-based paint hazard control in housing.

Worksite: Any interior or exterior area where lead-based paint hazard control work takes place.

Worksite preparation level: A set of measures designed to protect residents and the environment from leaded dust, paint chips, or other forms of lead contamination through the erection of barriers and the establishment of access control, resident relocation or movement restrictions, warning signs, ventilation, and other measures.

Worst-case sample: A sample of dwelling units having the greatest probability of containing lead-based paint hazards selected by a risk assessor on the basis of a visual examination of all dwelling units in a housing development or apartment building. See also Targeted sample and Random sample.

XRF analyzer: An instrument that determines lead concentration in milligrams per square centimeter (mg/cm²) using the principle of x-ray fluorescence (XRF). Two types of XRF analyzers are used—direct readers and spectrum analyzers. In these *Guidelines*, the term XRF analyzer only refers to portable instruments manufactured to analyze paint, and does not refer to laboratory-grade units or portable instruments designed to analyze soil.

Appendix 4

Inspector Certification



STATE OF CALIFORNIA DEPARTMENT OF PUBLIC HEALTH



LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:

CERTIFICATE TYPE:

NUMBER:

EXPIRATION DATE:

Lead Inspector/Assessor

LRC-00000459

5/31/2025

Lead Project Monitor

LRC-00000458

5/31/2025

Michelle Ehresman

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD

Appendix 5

CDPH 8552 Inspection Form

LEAD HAZARD EVALUATION REPORT

Section 1 — Date of Lead Hazard Evaluation	3/27/24					
Section 2 — Type of Lead Hazard Evaluat	ion (Che	ck one box only)			- in	
✓ Lead Inspection Risk assessment	Clea	arance Inspection	Othe	er (specify)		
Section 3 — Structure Where Lead Hazard Ev	aluation	Was Conducted			Ž.	
Address [number, street, apartment (if applicable)]		City		County	Zip Code	
331 The City Drive (Building 10)		Orange		Orange	92868	
Construction date (year) of structure Multi-unit building		School or daycare		Children living in structure? Yes No		
Unknown Single family of	dwelling	✓ Other		Don't Know		
Section 4 — Owner of Structure (if business/a	agency, li	st contact person)		y.		
Name			Telephone number			
c/o Vanir Contruction (Scott Battles)			916-677-7024			
Address [number, street, apartment (if applicable)]		City		State	Zip Code	
4540 Duckhorn Drive, Suite 300		Sacramento		CA	95834	
Section 5 — Results of Lead Hazard Evaluation	on (check	(all that annly)		A Company of the Comp		
Section 6 — Individual Conducting Lead Haza Name Michelle Ehresman Address [number, street, apartment (if applicable)] 7742 Arjons Drive CDPH certification number LRC 0459		City San Diego nature		ephone number 88-537-3999 State CA	Zip Code 92126 Date 4/27/24	
Name and CDPH certification number of any other indi	viduals cor	nducting sampling or testing	(it ap	pplicable)		
On the Fig. Attended to					a	
A. A foundation diagram or sketch of the structure lead-based paint; B. Each testing method, device, and sampling pr C. All data collected, including quality control data	ocedure u	used;		·		
First copy and attachments retained by inspector		Third copy only (no a	ıttach	ments) mailed or faxed to:		
Second copy and attachments retained by owner		California Department of Public Health Childhood Lead Poisoning Prevention Branch Reports 850 Marina Bay Parkway, Building P, Third Floor Richmond, CA 94804-6403 Fax: (510) 620-5656				

Appendix 6

Renovate Right



AUTION CAUTION

CAUTION

CAUTION

CAUTION







1-800-424-LEAD (5323) www.epa.gov/getleadsafe EPA-740-K-10-001 April 2010



Important lead hazard information for families, child care providers and schools.





IT'S THE LAW!

Federal law requires contractors that disturb painted surfaces in homes, child care facilities and schools, built before 1978 to be certified and follow specific work practices to prevent lead contamination. Always ask to see your contractor's certification.

Federal law requires that individuals receive certain information before renovating more than six square feet of painted surfaces in a room for interior projects or more than twenty square feet of painted surfaces for exterior projects or window replacement or demolition in housing, child care facilities and schools built before 1978.

- Homeowners and tenants: renovators must give you this pamphlet before starting work.
- Child care facilities, including preschools and kindergarten classrooms, and the families of children under six years of age that attend those facilities: renovators must provide a copy of this pamphlet to child care facilities and general renovation information to families whose children attend those facilities.



WHO SHOULD READ THIS PAMPHLET?

This pamphlet is for you if you:

- Reside in a home built before 1978.
- Own or operate a child care facility, including preschools and kindergarten classrooms, built before 1978, or
- Have a child under six years of age who attends a child care facility built before 1978.

You will learn:

- Basic facts about lead and your health.
- How to choose a contractor, if you are a property owner.
- What tenants, and parents/guardians of a child in a child care facility or school should consider.
- How to prepare for the renovation or repair job.
- What to look for during the job and after the job is done.
- Where to get more information about lead.

This pamphlet is not for:

- Abatement projects. Abatement is a set of activities aimed specifically at
 eliminating lead or lead hazards. EPA has regulations for certification and training of
 abatement professionals. If your goal is to eliminate lead or lead hazards, contact the
 National Lead Information Center at 1-800-424-LEAD (5323) for more information.
- "Do-it-yourself" projects. If you plan to do renovation work yourself, this document is a good start, but you will need more information to complete the work safely. Call the National Lead Information Center at 1-800-424-LEAD (5323) and ask for more information on how to work safely

in a home with lead-based paint.

Contractor education. Contractors
 who want information about working
 safely with lead should contact
 the National Lead Information
 Center at 1-800-424-LEAD (5323)
 for information about courses and
 resources on lead-safe work practices.



RENOVATING, REPAIRING, OR PAINTING?



- Is your home, your building, or the child care facility or school your children attend being renovated, repaired, or painted?
- Was your home, your building, or the child care facility or school where your children under six years of age attend built before 1978?

If the answer to these questions is YES, there are a few important things you need to know about lead-based paint.

This pamphlet provides basic facts about lead and information about lead safety when work is being done in your home, your building or the child care facility or school your children attend.

The Facts About Lead

- Lead can affect children's brains and developing nervous systems, causing reduced IQ, learning disabilities, and behavioral problems. Lead is also harmful to adults.
- Lead in dust is the most common way people are exposed to lead. People can also get lead in their bodies from lead in soil or paint chips. Lead dust is often invisible.
- Lead-based paint was used in more than 38 million homes until it was banned for residential use in 1978.
- Projects that disturb painted surfaces can create dust and endanger you and your family. Don't let this happen to you. Follow the practices described in this pamphlet to protect you and your family.

LEAD AND YOUR HEALTH

Lead is especially dangerous to children under six years of age.

Lead can affect children's brains and developing nervous systems, causing:

- Reduced IQ and learning disabilities.
- Behavior problems.

Even children who appear healthy can have dangerous levels of lead in their bodies.

Lead is also harmful to adults. In adults, low levels of lead can pose many dangers, including:

- High blood pressure and hypertension.
- Pregnant women exposed to lead can transfer lead to their fetuses. Lead gets into the body when it is swallowed or inhaled.
- People, especially children, can swallow lead dust as they eat, play, and do other normal hand-to-mouth activities.
- People may also breathe in lead dust or fumes if they disturb lead-based paint.
 People who sand, scrape, burn, brush or blast or otherwise disturb lead-based paint risk unsafe exposure to lead.

What should I do if I am concerned about my family's exposure to lead?

- Call your local health department for advice on reducing and eliminating exposures to lead inside and outside your home, child care facility or school.
- Always use lead-safe work practices when renovation or repair will disturb painted surfaces.
- A blood test is the only way to find out if you or a family member already has lead poisoning. Call your doctor or local health department to arrange for a blood test.

For more information about the health effects of exposure to lead, visit the EPA lead website at www.epa.gov/lead/pubs/leadinfo.htm or call 1-800-424-LEAD (5323).

There are other things you can do to protect your family every day.

- Regularly clean floors, window sills, and other surfaces.
- Wash children's hands, bottles, pacifiers, and toys often.
- Make sure children eat a healthy, nutritious diet consistent with the USDA's dietary guidelines, that helps protect children from the effects of lead.
- Wipe off shoes before entering house.



WHERE DOES THE LEAD COME FROM?

Dust is the main problem.

The most common way to get lead in the body is from dust. Lead dust comes from deteriorating lead-based paint and lead-contaminated soil that gets tracked into your home. This dust may accumulate to unsafe levels. Then, normal hand to-mouth activities, like playing and eating (especially in young children), move that dust from surfaces like floors and window sills into the body.

Home renovation creates dust.

Common renovation activities like sanding, cutting, and demolition can create hazardous lead dust and chips.

Proper work practices protect you from the dust.

The key to protecting yourself and your family during a renovation, repair or painting job is to use lead-safe work practices such as containing dust inside the work area, using dust-minimizing work methods, and conducting a careful cleanup, as described in this pamphlet.

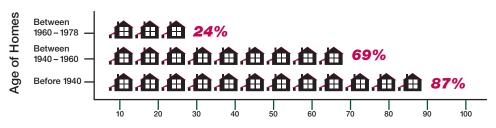
Other sources of lead.

Remember, lead can also come from outside soil, your water, or household items (such as lead-glazed pottery and lead crystal). Contact the National Lead Information Center at 1-800-424-LEAD (5323) for more information on these sources.



CHECKING YOUR HOME FOR LEAD-BASED PAINT

Percentage of Homes Likely to Contain Lead



Older homes, child care facilities, and schools are more likely to contain lead-based paint.

Homes may be single-family homes or apartments. They may be private, government-assisted, or public housing. Schools are preschools and kindergarten classrooms. They may be urban, suburban, or rural.

You have the following options:

You may decide to assume your home, child care facility, or school contains lead. Especially in older homes and buildings, you may simply want to assume lead-based paint is present and follow the lead-safe work practices described in this brochure during the renovation, repair, or painting job.

You can hire a certified professional to check for lead-based paint.

These professionals are certified risk assessors or inspectors, and can determine if your home has lead or lead hazards.

- A certified inspector or risk assessor can conduct an inspection telling you whether your home, or a portion of your home, has lead-based paint and where it is located. This will tell you the areas in your home where lead-safe work practices are needed.
- A certified risk assessor can conduct a risk assessment telling you if your home currently has any lead hazards from lead in paint, dust, or soil. The risk assessor can also tell you what actions to take to address any hazards.
- For help finding a certified risk assessor or inspector, call the National Lead Information Center at 1-800-424-LEAD (5323).

You may also have a certified renovator test the surfaces or components being disturbed for lead using a lead test kit. Test kits must be EPA-recognized and are available at hardware stores. They include detailed instructions for their use.

FOR PROPERTY OWNERS

You have the ultimate responsibility for the safety of your family, tenants, or children in your care.

This means properly preparing for the renovation and keeping persons out of the work area (see p. 8). It also means ensuring the contractor uses lead-safe work practices.

Federal law requires that contractors performing renovation, repair and painting projects that disturb painted surfaces in homes, child care facilities, and schools built before 1978 be certified and follow specific work practices to prevent lead contamination.

Make sure your contractor is certified, and can explain clearly the details of the job and how the contractor will minimize lead hazards during the work.

- You can verify that a contractor is certified by checking EPA's website at epa.gov/getleadsafe or by calling the National Lead Information Center at 1-800-424-LEAD (5323). You can also ask to see a copy of the contractor's firm certification.
- Ask if the contractor is trained to perform lead-safe work practices and to see a copy of their training certificate.
- Ask them what lead-safe methods they will use to set up and perform the job in your home, child care facility or school.
- Ask for references from at least three recent jobs involving homes built before 1978, and speak to each personally.

Always make sure the contract is clear about how the work will be set up, performed, and cleaned.

- Share the results of any previous lead tests with the contractor.
- You should specify in the contract that they follow the work practices described on pages 9 and 10 of this brochure.
- The contract should specify which parts of your home are part of the work area and specify which lead-safe work practices will be used in those areas. Remember, your contractor should confine dust and debris to the work area and should minimize spreading that dust to other areas of the home.
- The contract should also specify that the contractor will clean the work area, verify that it was cleaned adequately, and re-clean it if necessary.

If you think a worker is not doing what he is supposed to do or is doing something that is unsafe, you should:

- Direct the contractor to comply with regulatory and contract requirements.
- Call your local health or building department, or
- Call EPA's hotline 1-800-424-LEAD (5323).

If your property receives housing assistance from HUD (or a state or local agency that uses HUD funds), you must follow the requirements of HUD's Lead-Safe Housing Rule and the ones described in this pamphlet.

FOR TENANTS AND FAMILIES OF CHILDREN UNDER SIX YEARS OF AGE IN CHILD CARE FACILITIES AND SCHOOLS

You play an important role ensuring the ultimate safety of your family.

This means properly preparing for the renovation and staying out of the work area (see p. 8).

Federal law requires that contractors performing renovation, repair and painting projects that disturb painted surfaces in homes built before 1978 and in child care facilities and schools built before 1978, that a child under six years of age visits regularly, to be certified and follow specific work practices to prevent lead contamination.

The law requires anyone hired to renovate, repair, or do painting preparation work on a property built before

1978 to follow the steps described on pages 9 and 10 unless the area where the work will be done contains no lead-based paint.

If you think a worker is not doing what he is supposed to do or is doing something that is unsafe, you should:

- · Contact your landlord.
- · Call your local health or building department, or
- Call EPA's hotline 1-800-424-LEAD (5323).

If you are concerned about lead hazards left behind after the job is over, you can check the work yourself (see page 10).



PREPARING FOR A RENOVATION

The work areas should not be accessible to occupants while the work occurs.

The rooms or areas where work is being done may need to be blocked off or sealed with plastic sheeting to contain any dust that is generated. Therefore, the contained area may not be available to you until the work in that room or area is complete, cleaned thoroughly, and the containment has been removed. Because you may not have access to some areas during the renovation, you should plan accordingly.

You may need:

- Alternative bedroom, bathroom, and kitchen arrangements if work is occurring in those areas of your home.
- A safe place for pets because they too can be poisoned by lead and can track lead dust into other areas of the home.
- A separate pathway for the contractor from the work area to the outside in order to bring materials in and out of the home. Ideally, it should not be through the same entrance that your family uses.
- A place to store your furniture. All furniture and belongings may have to be moved from the work area while the work is being done. Items that can't be moved, such as cabinets, should be wrapped in plastic.
- To turn off forced-air heating and air conditioning systems while the work is being done. This prevents dust from spreading through vents from the work area to the rest of your home. Consider how this may affect your living arrangements.

You may even want to move out of your home temporarily while all or part of the work is being done.

Child care facilities and schools may want to consider alternative accommodations for children and access to necessary facilities.



DURING THE WORK

Federal law requires contractors that are hired to perform renovation, repair and painting projects in homes, child care facilities, and schools built before 1978 that disturb painted surfaces to be certified and follow specific work practices to prevent lead contamination.

The work practices the contractor must follow include these three simple procedures, described below:

- 1. Contain the work area. The area must be contained so that dust and debris do not escape from that area. Warning signs must be put up and plastic or other impermeable material and tape must be used as appropriate to:
 - Cover the floors and any furniture that cannot be moved.
 - Seal off doors and heating and cooling system vents.

These will help prevent dust or debris from getting outside the work area.

2. Avoid renovation methods that generate large amounts of lead-contaminated dust.

Some methods generate so much lead-contaminated dust that their use is prohibited.

They are:

- · Open flame burning or torching.
- Sanding, grinding, planing, needle gunning, or blasting with power tools and equipment not equipped with a shroud and HEPA vacuum attachment.
- Using a heat gun at temperatures greater than 1100°F.

There is no way to eliminate dust, but some renovation methods make less dust than others. Contractors may choose to use various methods to minimize dust generation, including using water to mist areas before sanding or scraping; scoring paint before separating components; and prying and pulling apart components instead of breaking them.

- **3. Clean up thoroughly.** The work area should be cleaned up daily to keep it as clean as possible. When all the work is done, the area must be cleaned up using special cleaning methods before taking down any plastic that isolates the work area from the rest of the home. The special cleaning methods should include:
 - Using a HEPA vacuum to clean up dust and debris on all surfaces, followed by
 - Wet wiping and wet mopping with plenty of rinse water.

When the final cleaning is done, look around. There should be no dust, paint chips, or debris in the work area. If you see any dust, paint chips, or debris, the area must be re-cleaned.

FOR PROPERTY OWNERS: AFTER THE WORK IS DONE

When all the work is finished, you will want to know if your home, child care facility, or school has been cleaned up properly. Here are some ways to check.

Ask about your contractor's final cleanup check. Remember, lead dust is often invisible to the naked eye. It may still be present even if you cannot see it. The contractor must use disposable cleaning cloths to wipe the floor of the work area and compare them to a cleaning verification card to determine if the work area was adequately cleaned.

To order a cleaning verification card and detailed instructions visit the EPA lead website at www.epa.gov/lead or contact the National Lead Information Center at 1-800-424-LEAD (5323) or visit their website at www.epa.gov/lead/nlic.htm.

You also may choose to have a lead-dust test. Lead-dust tests are wipe samples sent to a laboratory for analysis.

- You should specify in your contract that a lead-dust test will be done. In this case, make it clear who will do the testing.
- Testing should be done by a lead professional.

If you choose to do the testing, some EPA-recognized lead laboratories will send you a kit that allows you to collect samples and send them back to the lab for analysis.

Contact the National Lead Information Center at 1-800-424-LEAD (5323) for lists of qualified professionals and EPA-recognized lead labs.

If your home, child care facility, or school fails the dust test, the area should be re-cleaned and tested again.

Where the project is done by contract, it is a good idea to specify in the contract that the contractor is responsible for re-cleaning if the home, child care facility, or school fails the test.



FOR ADDITIONAL INFORMATION

You may need additional information on how to protect yourself and your children while a job is going on in your home, your building, or child care facility.

The National Lead Information Center at 1-800-424-LEAD (5323) or www.epa.gov/lead/nlic.htm can tell you how to contact your state, local, and/or tribal programs or get general information about lead poisoning prevention.

- State and tribal lead poisoning prevention or environmental protection programs can provide information about lead regulations

 and potential sources of force is laid for reducing.
- and potential sources of financial aid for reducing lead hazards. If your state or local government has requirements more stringent than those described in this pamphlet, you must follow those requirements.
- Local building code officials can tell you the regulations that apply to the renovation work that you are planning.
- State, county, and local health departments can provide information about local programs, including assistance for lead-poisoned children and advice on ways to get your home checked for lead.

The National Lead Information Center can also provide a variety of resource materials, including the following guides to lead-safe work practices. Many of these materials are also available at www.epa.gov/lead/pubs/brochure.htm.

- Steps to Lead Safe Renovation, Repair and Painting.
- Protect Your Family from Lead in Your Home
- Lead in Your Home: A Parent's Reference Guide





For the hearing impaired, call the Federal Information Relay Service at 1-800-877-8339 to access any of the phone numbers in this brochure.

10

OTHER FEDERAL AGENCIES

EPA Regional Offices

EPA addresses residential lead hazards through several different regulations.

EPA requires training and certification for conducting abatement and renovations, education about hazards associated with renovations, disclosure about known lead paint and lead hazards in housing, and sets lead-paint hazard standards.

Your Regional EPA Office can provide further information regarding lead safety and lead protection programs at **epa.gov/lead**.

Region 1

(Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island, Vermont) Regional Lead Contact U.S. EPA Region 1 Suite 1100 One Congress Street Boston, MA 02114-2023 (888) 372-7341

Region 2

(New Jersey, New York, Puerto Rico, Virgin Islands) Regional Lead Contact U.S. EPA Region 2 2890 Woodbridge Avenue Building 205, Mail Stop 225 Edison, NJ 08837-3679 (732) 321-6671

Region 3

(Delaware, Maryland, Pennsylvania, Virginia, Washington, DC, West Virginia) Regional Lead Contact U.S. EPA Region 3 1650 Arch Street Philadelphia, PA 19103-2029 (215) 814-5000

Region 4

(Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee) Regional Lead Contact U.S. EPA Region 4 61 Forsyth Street, SW Atlanta, GA 30303-8960 (404) 562-9900

Region 5

(Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin) Regional Lead Contact U.S. EPA Region 5 77 West Jackson Boulevard Chicago, IL 60604-3507 (312) 886-6003

Region 6

(Arkansas, Louisiana, New Mexico, Oklahoma, Texas) Regional Lead Contact U.S. EPA Region 6 1445 Ross Avenue, 12th Floor Dallas, TX 75202-2733 (214) 665-6444

Region 7

(Iowa, Kansas, Missouri, Nebraska) Regional Lead Contact U.S. EPA Region 7 901 N. 5th Street Kansas City, KS 66101 (913) 551-7003

Region 8

(Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming) Regional Lead Contact U.S. EPA Region 8 1595 Wynkoop Street Denver, CO 80202 (303) 312-6312

Region 9

(Arizona, California, Hawaii, Nevada) Regional Lead Contact U.S. Region 9 75 Hawthorne Street San Francisco, CA 94105 (415) 947-8021

Region 10

(Alaska, Idaho, Oregon, Washington) Regional Lead Contact U.S. EPA Region 10 1200 Sixth Avenue Seattle, WA 98101-1128 (206) 553-1200

CPSC

The Consumer Product Safety
Commission (CPSC) protects the public
from the unreasonable risk of injury or
death from 15,000 types of consumer
products under the agency's jurisdiction.
CPSC warns the public and private
sectors to reduce exposure to lead and
increase consumer awareness. Contact
CPSC for further information regarding
regulations and consumer product safety.

CPSC

4330 East West Highway Bethesda, MD 20814 Hotline 1-(800) 638-2772 www.cpsc.gov

CDC Childhood Lead Poisoning Prevention Branch

The Centers for Disease Control and Prevention (CDC) assists state and local childhood lead poisoning prevention programs to provide a scientific basis for policy decisions, and to ensure that health issues are addressed in decisions about housing and the environment. Contact CDC Childhood Lead Poisoning Prevention Program for additional materials and links on the topic of lead.

CDC Childhood Lead Poisoning Prevention Branch

4770 Buford Highway, MS F-40 Atlanta, GA 30341 (770) 488-3300 www.cdc.gov/nceh/lead

HUD Office of Healthy Homes and Lead Hazard Control

The Department of Housing and Urban Development (HUD) provides funds to state and local governments to develop cost-effective ways to reduce lead-based paint hazards in America's privately-owned low-income housing. In addition, the office enforces the rule on disclosure of known lead paint and lead hazards in housing, and HUD's lead safety regulations in HUD-assisted housing, provides public outreach and technical assistance, and conducts technical studies to help protect children and their families from health and safety hazards in the home. Contact the HUD Office of Healthy Homes and Lead Hazard Control for information on lead regulations, outreach efforts, and lead hazard control research and outreach grant programs.

U.S. Department of Housing and Urban Development

Office of Healthy Homes and Lead Hazard Control 451 Seventh Street, SW, Room 8236 Washington, DC 20410-3000 HUD's Lead Regulations Hotline (202) 402-7698 www.hud.gov/offices/lead/

12



SAMPLE PRE-RENOVATION FORM

This sample form may be used by renovation firms to document compliance with the Federal pre-renovation education and renovation, repair, and painting regulations.

Occupant Confirmation Pamphlet Receipt

□ I have received a copy of the lead hazard info potential risk of the lead hazard exposure fro dwelling unit. I received this pamphlet befor	om renovation activity to be performed in my
Printed Name of Owner-occupant	
Signature of Owner-occupant	Signature Date
Renovator's Self Certification Option (for tend Instructions to Renovator: If the lead hazard int signature was not obtainable, you may check t	formation pamphlet was delivered but a tenant
pamphlet to the rental dwelling unit listed b	faith effort to deliver the lead hazard information elow at the date and time indicated and that the of receipt. I further certify that I have left a copy nt.
was unavailable to sign the confirmation of r	ave made a good faith effort to deliver the lead lwelling unit listed below and that the occupant receipt. I further certify that I have left a copy of the door or by (fill in how pamphlet was left).
Printed Name of Person Certifying Delivery	Attempted Delivery Date
Signature of Person Certifying Lead Pamphlet	Delivery
Unit Address	

Note Regarding Mailing Option — As an alternative to delivery in person, you may mail the lead hazard information pamphlet to the owner and/or tenant. Pamphlet must be mailed at least seven days before renovation. Mailing must be documented by a certificate of mailing from the post office.