APPENDIX A

PUBLIC INVOLVEMENT

Scoping Summary

Introduction

The City of Long Beach (City), as Lead Agency under the California Environmental Quality Act (CEQA), is proposing the 5910 Cherry Avenue Industrial Building Project (proposed Project). The Project site is currently developed with eight single-story buildings, ranging from 2,400 to 33,100 square feet (SF), on the northern and western portions of the Project site. The proposed Project involves demolition of these eight buildings and construction of a single, approximately 304,344 SF tilt-up light-industrial building with associated parking and landscaping.

The proposed building would be 51 feet high and surrounded by parking areas that would include up to 338 at-grade parking stalls and 79 at-grade truck parking stalls. Passenger vehicle parking would be situated in front of the proposed building, along Cherry Avenue, along the south side of the lot, and in the rear of the building in the northeast corner of the lot. The building would feature 44-truck high-dock doors along the south elevation facing the abutting commercial site. Approximately 10,066 SF of office space would be accommodated in the southwest corner of the building along Cherry Avenue. The office space would be located on the first floor and mezzanine level of the proposed building. The proposed Project would also include landscaping along Cherry Avenue, the northern periphery of the Project site, and along the rear of the proposed building.

The Project site is currently zoned (IG) General Industrial. The proposed Project seeks a zone change for the Project site to (IL) Light Industrial.

Notice of Preparation

The Notice of Preparation (NOP) was prepared pursuant to Section 15082 of the CEQA Guidelines to notify interested parties that the City will be preparing an Environmental Impact Report (EIR) to evaluate potential environmental impacts of the proposed Project. The NOP was posted by the County Clerk in Los Angeles on October 9, 2023 (see Attachment 1). A Notice of Completion (NOC) for the NOP was prepared by the City and sent to the State Clearinghouse. The proposed Project was assigned to State Clearinghouse Number SCH# 2023100342 and the proposed Project information was posted in the CEQAnet Database (see Attachment 2). The NOP was also published in the Long Beach Press-Telegram newspaper on October 10, 2023 (see Attachment 3) and made available for public review on the City of Long Beach website (https://www.longbeach.gov/lbcd/planning/environmental/reports/).

Scoping Period

The 30-day public scoping period began with the distribution of the NOP on October 9, 2023, and remained open through November 10, 2023. During the scoping period, one virtual public scoping meeting was held on November 1, 2023, between 5:00 p.m. and 7:00 p.m. The purpose of the virtual scoping meeting was to provide an overview of the proposed Project, an overview of the CEQA process, and the timeline for environmental review. During the virtual scoping meeting, Kimley-Horn gave a presentation on the proposed Project and the CEQA process (see Attachment 4) and recorded participant comments and questions.

Comments

During the scoping period, the City received a total of five (5) comment letters on the proposed Project via mail and e-mail (see Attachment 5). **Table 1** below lists the agencies and individuals that submitted comments during the 30-day public review period. Additional comments and questions recorded during the virtual scoping meeting are included as Attachment 6. CEQA does not require the City to formally respond to the comments received at the virtual scoping meeting, but rather to consider these comments during preparation of the EIR.

Table 1: List of Commenters

Comment Number	Commenter	Date Received (2023)
Agencies		
1	Native American Heritage Commission	October 13
2	California Environmental Justice Bureau	October 17
3	California Department of Transportation	October 25
4	Long Beach Unified School District	November 9
Individuals		
5	Kirk Davis	November 10

The next formal opportunity for public comments will be associated with the release of the Draft Environmental Impact Report.

List of Attachments

The following documents pertinent to the scoping process are included as attachments:

Attachment 1: Notice of Preparation
Attachment 2: Notice of Completion
Attachment 3: Newspaper Publication
Attachment 4: Scoping Meeting Presentation
Attachment 5: Comment Letters Received
Attachment 6: Virtual Scoping Meeting Comments

Attachment 1:
Notice of Preparation

CITY OF LONG BEACH

Notice of Preparation

of an Environmental Impact Report

TO: Agencies, Organizations, and Interested Parties

FROM: City of Long Beach
Community Development Department, Planning Bureau
411 W. Ocean Boulevard, 3rd Floor
Long Beach, CA 90802

SUBJECT: 5910 Cherry Avenue Industrial Building Project – Notice of Preparation of an Environmental Impact Report in Compliance with Title 14, Section 15082(a) of the California Code of Regulations

Pursuant to Public Resources Code Section 21165 and the Guidelines for the California Environmental Quality Act (CEQA) Section 15050, the City of Long Beach is the lead agency responsible for preparation of an Environmental Impact Report (EIR) addressing potential impacts associated with the project identified below.

AGENCIES: The purpose of this document is to serve as a Notice of Preparation (NOP) of an EIR pursuant to the CEQA Guidelines Section 15082 and solicit comments and suggestions regarding the scope and content of the EIR to be prepared for the proposed project. Specifically, the City of Long Beach requests input on the environmental information germane to your agency's statutory responsibility in connection with the proposed project. Your agency may rely on the EIR prepared by the City of Long Beach when considering permits or other approvals for this project.

ORGANIZATIONS AND INTERESTED PARTIES: The City of Long Beach requests your comments and concerns regarding the proposed scope and content of the environmental information to be included in the EIR.

PROJECT TITLE: 5910 Cherry Avenue Industrial Building Project

PROJECT LOCATION: 5910 Cherry Avenue, Long Beach, California. The proposed project site is approximately 14.16 acres (Assessor's Parcel Number 7119-018-033) located within the northern half of the city of Long Beach 650 feet north of the intersection of Cherry Avenue and South Street. The proposed project is developed with existing industrial uses that will be demolished and redeveloped with a single, approximately 304,344 square foot (sf) concrete, tilt-up industrial warehouse building. The Project site can be accessed via Cherry Avenue.

PROJECT DESCRIPTION: The project is a single, approximately 304,344 sf, concrete, tilt-up industrial building. The proposed building would be 51 feet high and surrounded by parking areas that would include at-grade parking. Passenger vehicle parking would be situated in front of the proposed building, along Cherry Avenue, along the south side of the lot, and in the rear of the building in the northeast corner of the lot. The building could feature high-dock doors along the south elevation facing the abutting commercial site. Office space would be accommodated in the southwest corner of the building along Cherry Avenue on the first floor and/or mezzanine levels of the proposed building. To prepare for redevelopment of the parcel with the proposed project, the existing 8 buildings would be demolished and removed from the project site. The proposed project improvements are consistent with the land use and development standards of the Industrial (IG) zoning district in which the project is situated.

POTENTIAL ENVIRONMENTAL EFFECTS: Potentially significant environmental impacts associated with the proposed project could include Air Quality, Cultural Resources, Geology/Soils, Greenhouse Gas Emissions, Noise, and Transportation. These topics will be addressed in the EIR. In addition, the EIR will describe and evaluate project alternatives that may reduce or avoid any identified significant adverse impacts of the project.

PUBLIC REVIEW PERIOD: This NOP is available for public review and comment pursuant to California Code of Regulations, Title 14, Section 15082(b). Comments must be submitted no later than 30 days of receipt. The NOP and accompanying Initial Study are available for a 30-day public review period beginning **Monday, October 9, 2023**, and ending **Friday, November 10, 2023.**

SCOPING MEETING: As part of the NOP process, the City of Long Beach will conduct a virtual public scoping meeting to present the proposed project and environmental process. After the presentation, public comments will be accepted either orally or in writing via the chat function. The meeting will end at 7:00 P.M. or after the last comment, whichever occurs first. The Scoping Meeting will be held via web conference per the details below:

Meeting Information
Date: November 1, 2023 5:00 P.M. Pacific
Time: 5:00 P.M. to 7:00 P.M.

Please click the link below to join the webinar:

https://longbeach-gov.zoom.us/j/91486102844?pwd=b0liYzQ0Ym5nNHdNeENCaS9vT1B6QT09

Passcode: 824083

Or One tap mobile :
+12133388477,,91486102844# US (Los Angeles)
Or Telephone:
Dial(for higher quality, dial a number based on your current location):
+1 213 338 8477 US (Los Angeles)

Webinar ID: 914 8610 2844
International numbers available: https://longbeach-gov.zoom.us/u/acjbIvnQl8

RESPONSES AND COMMENTS: The City of Long Beach will accept written comments only during the aforementioned public review period ending on Friday, November 10, 2023 at 4:30 P.M. Comments must be submitted via letter or email to the contact below. Comments made via other means, including social media, or delivered to other recipients, will not be accepted or considered. Please indicate a contact person for your agency or organization and send your written comments to:

Department of Development Services, Planning Bureau
ATTN: Amy L. Harbin, Planner
411 W. Ocean Boulevard, 3rd Floor
Long Beach, CA 90802
(562) 570-6872
LBDS-EIR-Comments@longbeach.gov

Attachment 2:
Notice of Completion

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH #

Project Title: 5910 Cherry Avenue Industrial Building Project

Lead Agency: City of Long Beach | Contact Person: Amy L. Harbin

Mailing Address: Department of Development Services, Planning Bureau,411 W. Ocean Boulevard, 3rd Floor | Phone: (562) 570-6872

City: Long Beach | Zip: 90802 | County: Los Angeles

Project Location: County: Los Angeles | City/Nearest Community: Long Beach

Cross Streets: Cherry Avenue and South Street | Zip Code: 90805

Longitude/Latitude (degrees, minutes and seconds): 33 ° 51 ′ 47 ″ N / 118 ° 10 ′ 06.41 ″ W Total Acres:

Assessor's Parcel No.: 7119-018-033 | Section: 00 | Twp.: 13S | Range: 12W | Base:

Within 2 Miles: State Hwy #: 91, 19, 710 | Waterways: Los Angeles River

Airports: None | Railways: Union Pacific | Schools: Harte, Collins, Grant, McKinley, Leona Jackson, Wesley

Document Type:

CEQA: ☒ NOP ☐ Draft EIR | NEPA: ☐ NOI | Other: ☐ Joint Document
☐ Early Cons ☐ Supplement/Subsequent EIR | ☐ EA | ☐ Final Document
☐ Neg Dec (Prior SCH No.) | ☐ Draft EIS | ☐ Other:
☐ Mit Neg Dec ☐ Other: | ☐ FONSI

Local Action Type:

☐ General Plan Update ☐ Specific Plan ☐ Rezone ☐ Annexation
☐ General Plan Amendment ☐ Master Plan ☐ Prezone ☐ Redevelopment
☐ General Plan Element ☐ Planned Unit Development ☐ Use Permit ☐ Coastal Permit
☐ Community Plan ☒ Site Plan ☐ Land Division (Subdivision, etc.) ☐ Other:

Development Type:

☐ Residential: Units Acres
☐ Office: Sq.ft. Acres Employees
☐ Commercial: Sq.ft. Acres Employees
☒ Industrial: Sq.ft. 304,300 Acres 14.6 Employees 25
☐ Educational:
☐ Recreational:
☐ Water Facilities: Type MGD

☐ Transportation: Type
☐ Mining: Mineral
☐ Power: Type MW
☐ Waste Treatment: Type MGD
☐ Hazardous Waste: Type
☐ Other:

Project Issues Discussed in Document:

☐ Aesthetic/Visual ☐ Fiscal ☐ Recreation/Parks ☐ Vegetation
☐ Agricultural Land ☐ Flood Plain/Flooding ☐ Schools/Universities ☐ Water Quality
☒ Air Quality ☐ Forest Land/Fire Hazard ☐ Septic Systems ☐ Water Supply/Groundwater
☒ Archeological/Historical ☒ Geologic/Seismic ☐ Sewer Capacity ☐ Wetland/Riparian
☐ Biological Resources ☐ Minerals ☐ Soil Erosion/Compaction/Grading ☐ Growth Inducement
☐ Coastal Zone ☒ Noise ☐ Solid Waste ☐ Land Use
☐ Drainage/Absorption ☐ Population/Housing Balance ☐ Toxic/Hazardous ☐ Cumulative Effects
☐ Economic/Jobs ☐ Public Services/Facilities ☒ Traffic/Circulation ☐ Other:

Present Land Use/Zoning/General Plan Designation:

Neo-Industrial (NI) land use/General Industrial (IG) zoning district

Project Description: *(please use a separate page if necessary)*

The project is a single, approximately 304,344 sf, concrete, tilt-up industrial warehouse building. The proposed building would be 51 feet high and surrounded by parking areas that would include 338 at-grade parking stalls and 79 at-grade truck parking stalls. Passenger vehicle parking would be situated in front of the proposed building, along Cherry Avenue, along the south side of the lot, and in the rear of the building in the northeast corner of the lot. The building would feature 44-truck high-dock doors along the south elevation facing the abutting commercial site. Approximately 10,066 sf of office space would be accommodated in the southwest corner of the building along Cherry Avenue. The office space would be located on the first floor and mezzanine level of the proposed building. To prepare for redevelopment of the parcel with the proposed project, the existing 8 buildings would be demolished and removed from the project site. The proposed project improvements are consistent with the land use and development standards of the Industrial (IG) zoning district in which the project is situated.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "**X**".
If you have already sent your document to the agency please denote that with an "**S**".

_____ Air Resources Board
_____ Boating & Waterways, Department of
_____ California Emergency Management Agency
_____ California Highway Patrol
_____ Caltrans District # _____
_____ Caltrans Division of Aeronautics
_____ Caltrans Planning
_____ Central Valley Flood Protection Board
_____ Coachella Valley Mtns. Conservancy
_____ Coastal Commission
_____ Colorado River Board
_____ Conservation, Department of
_____ Corrections, Department of
_____ Delta Protection Commission
_____ Education, Department of
_____ Energy Commission
_____ Fish & Game Region # _____
_____ Food & Agriculture, Department of
_____ Forestry and Fire Protection, Department of
_____ General Services, Department of
_____ Health Services, Department of
_____ Housing & Community Development
_____ Native American Heritage Commission
_____ Office of Historic Preservation
_____ Office of Public School Construction
_____ Parks & Recreation, Department of
_____ Pesticide Regulation, Department of
_____ Public Utilities Commission
_____ Regional WQCB # _____
_____ Resources Agency
_____ Resources Recycling and Recovery, Department of
_____ S.F. Bay Conservation & Development Comm.
_____ San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
_____ San Joaquin River Conservancy
_____ Santa Monica Mtns. Conservancy
_____ State Lands Commission
_____ SWRCB: Clean Water Grants
_____ SWRCB: Water Quality
_____ SWRCB: Water Rights
_____ Tahoe Regional Planning Agency
_____ Toxic Substances Control, Department of
_____ Water Resources, Department of
_____ Other: _____
_____ Other: _____

Local Public Review Period (to be filled in by lead agency)

Starting Date 10/09/23 Ending Date 11/10/23

Lead Agency (Complete if applicable):

Consulting Firm: Kimley-Horn
Address: 660 South Figueroa Street, Suite 2050
City/State/Zip: Los Angeles, CA 90017
Contact: Chris Jones, AICP
Phone: 213-928-1187

Applicant: _____
Address: _____
City/State/Zip: _____
Phone: _____

Signature of Lead Agency Representative: Amy L. Harbin Digitally signed by Amy L. Harbin Date: 2023.10.12 14:33:24 -07'00' **Date:** 10/12/23

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

Notice of Preparation

To: State Clearinghouse
1400 10th St #12
Sacramento, CA 95814
(Address)

From: City of Long Beach
411 W. Ocean Boulevard, 3rd Floor
Long Beach, CA 90802
(Address)

Subject: Notice of Preparation of a Draft Environmental Impact Report

City of Long Beach will be the Lead Agency and will prepare an environmental impact report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, and the potential environmental effects are contained in the attached materials. A copy of the Initial Study (☐ is ☒ is not) attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice.

Please send your response to Amy L. Harbin at the address shown above. We will need the name for a contact person in your agency.

Project Title: 5910 Cherry Avenue Industrial Building Project

Project Applicant, if any:

Date October 12, 2023

Signature 

Title Planner

Telephone 562-570-6872

Reference: California Code of Regulations, Title 14, (CEQA Guidelines) Sections 15082(a), 15103, 15375.

5910 Cherry Avenue Industrial Building Project

Summary

SCH Number
2023100342

Lead Agency
City of Long Beach

Document Title
5910 Cherry Avenue Industrial Building Project

Document Type
NOP - Notice of Preparation of a Draft EIR

Received
10/12/2023

Present Land Use
General Industrial (IG) zoning district/Neo-Industrial (NI) land use

Document Description
The project is a single, approximately 304,344 sf, concrete, tilt-up industrial warehouse building. The proposed building would be 51 feet high and surrounded by parking areas that would include 338 at-grade parking stalls and 79 at-grade truck parking stalls. Passenger vehicle parking would be situated in front of the proposed building, along Cherry Avenue, along the south side of the lot, and in the rear of the building in the northeast corner of the lot. The building would feature 44-truck high-dock doors along the south elevation facing the abutting commercial site. Approximately 10,066 sf of office space would be accommodated in the southwest corner of the building along Cherry Avenue. The office space would be located on the first floor and mezzanine level of the proposed building. To prepare for redevelopment of the parcel with the proposed project, the existing 8 buildings would be demolished and removed from the project site. The proposed project improvements are consistent with the land use and development standards of the Industrial (IG) zoning district in which the project is situated.

Contact Information

Name
Amy L. Harbin

Agency Name
City of Long Beach, Community Development Department, Planning Bureau

Job Title
Planner

Contact Types
Lead/Public Agency

Address
411 W. Ocean Boulevard, 3rd Floor
Long Beach, CA 90802

Phone
(562) 570-6872

Email
LBDS-EIR-Comments@longbeach.gov

Location

Coordinates
33°51'47"N 118°10'6.41"W

Cities
Long Beach

Counties
Los Angeles

Regions
Citywide

Cross Streets
Cherry Avenue and South Street

Zip
90805

Total Acres
14.16

Parcel #
7119-018-033

State Highways
91, 19, 710

Railways
Union Pacific

Airports
None

Schools
Harte, Collins, Grant, McKinley, Leona Jackson, Wesley Gaines

Waterways
Los Angeles River

Township

3S

Range
12W

Section
00

Notice of Completion

State Review Period Start
10/12/2023

State Review Period End
11/13/2023

State Reviewing Agencies
California Air Resources Board (ARB), California Department of Fish and Wildlife, South Coast Region 5 (CDFW), California Department of Parks and Recreation, California Department of Water Resources (DWR), California Highway Patrol (CHP), California Natural Resources Agency, California Public Utilities Commission (CPUC), California Regional Water Quality Control Board, Los Angeles Region 4 (RWQCB), California Santa Monica Mountains Conservancy (SMMC), California State Lands Commission (SLC), Department of Toxic Substances Control, Office of Historic Preservation, San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy (RMC), Santa Monica Bay Restoration, State Water Resources Control Board, Division of Water Quality, California Native American Heritage Commission (NAHC), California Department of Transportation, District 7 (DOT)

State Reviewing Agency Comments
California Native American Heritage Commission (NAHC), California Department of Transportation, District 7 (DOT)

Development Types
Industrial (Sq. Ft. 304344, Acres 14.16, Employees 25)

Local Actions
Site Plan

Project Issues
Air Quality, Cultural Resources, Geology/Soils, Greenhouse Gas Emissions, Noise, Transportation

Local Review Period Start
10/9/2023

Local Review Period End
11/10/2023

Attachments

Draft Environmental Document [Draft IS, NOI_NOA_Public notices, OPR Summary Form, Appx,]

20210820-NOP_5910_Cherry PDF 139 K | 5910-cherry-draft-nop-final PDF 151 K

Notice of Completion [NOC] Transmittal form

20210820-NOC_5910_Cherry PDF 241 K

State Comment Letters [Comments from state reviewing agencies]

2023100342_DOT comment PDF 364 K

2023100342_NAHC Comment PDF 416 K

Disclaimer: The Governor's Office of Planning and Research (OPR) accepts no responsibility for the content or accessibility of these documents. To obtain an attachment in a different format, please contact the lead agency at the contact information listed above. You may also contact the OPR via email at state.clearinghouse@opr.ca.gov or via phone at (916) 445-0613. For more information, please visit OPR's Accessibility Site.

Attachment 3:
Newspaper Publication

See Proof on Next Page

PRESS-TELEGRAM
Local. News. Matters.
presstelegram.com

Long Beach Press-Telegram
5150 E. Pacific Coast Highway Suite 200
Long Beach, California 90804
(562) 499-1236

City of Long Beach Planning Bureau
411 West Ocean Blvd, 3rd Floor
Long Beach, California 90802

FILE NO. 0011627846

PROOF OF PUBLICATION
(2015.5 C.C.P.)

STATE OF CALIFORNIA
County of Los Angeles

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not party to or interested in the above-entitled matter. I am the principal clerk of the printer of Long Beach Press-Telegram, a newspaper of general circulation, printed and published in the City of Long Beach*, County of Los Angeles, and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of Los Angeles, State of California, under the date of March 21, 1934, Case Number 370512. The notice, of which the annexed is a printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

10/10/2023

I certify (or declare) under the penalty of perjury that the foregoing is true and correct.

Executed at Long Beach, California,
this 10th day of October, 2023.

Signature

*Long Beach Press-Telegram, a newspaper of general circulation, is delivered to and available in but not limited to the following cities: Long Beach, Lakewood, Bellflower, Cerritos, Downey, Norwalk, Artesia, Paramount, Wilmington, Compton, South Gate, Los Alamitos, Seal Beach, Cypress, La Palma, Lynwood, San Pedro, Hawaiian Gardens, and Signal Hill.

City of Long Beach
Notice of Preparation of an Environmental Impact Report

TO: Agencies, Organizations, and Interested Parties
FROM: City of Long Beach
Community Development Department, Planning Bureau 411 W. Ocean Boulevard, 3rd Floor
Long Beach, CA 90802

SUBJECT: 5910 Cherry Avenue Industrial Building Project – Notice of Preparation of an Environmental Impact Report in Compliance with Title 14, Section 15082(a) of the California Code of Regulations
Pursuant to Public Resources Code Section 21165 and the Guidelines for the California Environmental Quality Act (CEQA) Section 15050, the City of Long Beach is the lead agency responsible for preparation of an Environmental Impact Report (EIR) addressing potential impacts associated with the project identified below .
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ORGANIZATIONS AND INTERESTED PARTIES: The City of Long Beach requests your comments and concerns regarding the proposed scope and content of the environmental information to be included in the EIR.
PROJECT TITLE : 5910 Cherry Avenue Industrial Building Project

PROJECT LOCATION: 5910 Cherry Avenue, Long Beach, California. The proposed project site is approximately 14.16 acres (Assessor's Parcel Number 7119-018-033) located within the northern half of the city of Long Beach 650 feet north of the intersection of Cherry Avenue and South Street. The proposed project is developed with existing industrial uses that will be demolished and redeveloped with a single, approximately 304,344 square foot (sf) concrete, tilt-up industrial warehouse building. The Project site can be accessed via Cherry Avenue.

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SCOPING MEETING: As part of the NOP process, the City of Long Beach will conduct a virtual public scoping meeting to present the proposed project and environmental process. After the presentation, public comments will be accepted either orally or in writing via the chat function. The meeting will end at 7:00 P.M. or after the last comment, whichever occurs first. The Scoping Meeting will be held via web conference per the details below:
Meeting Information
Date: November 1, 2023 5:00 P.M. Pacific
Time: 5:00 P.M. to 7:00 P.M.

Please click the link below to join the webinar :

https://longbeach-gov.zoom.us/j/91486102844?pwd=b0liYzQ0Ym5nNHdNeENCaS9vT1B6QT09

Passcode: 824083

Or One tap mobile :
+12133388477,,91486102844# US (Los Angeles)
Or Telephone:
Dial(for higher quality, dial a number based on your current location):
+1 213 338 8477 US (Los Angeles)

Webinar ID: 914 8610 2844
International numbers available: https://longbeach-gov.zoom.us/u/acjblvnQl8

RESPONSES AND COMMENTS: The City of Long Beach will accept written comments only during the aforementioned public review period ending on Friday, November 10, 2023 at 4:30 P.M. Comments must be submitted via letter or email to the contact below. Comments made via other means, including social media, or delivered to other recipients, will not be accepted or considered. Please indicate a contact person for your agency or organization and send your written comments to:

Department of Development Services, Planning Bureau ATTN: Amy L. Harbin, Planner
411 W. Ocean Boulevard, 3rd Floor Long Beach, CA 90802
(562) 570- 6872
LBDS-EIR-Comments@longbeach.gov

Long Beach Press-Telegram
Published: 10/10/23

Attachment 4:
Scoping Meeting Presentation



5910 Cherry Avenue Industrial Building Project

Environmental Impact Report

PUBLIC SCOPING MEETING

NOVEMBER 1, 2023

LONGBEACH DEVELOPMENT SERVICES | CITY OF LONGBEACH

Tonight's Agenda

- Introductions
- Purpose of Scoping Meeting
- Project Overview
- CEQA Process
- Project Schedule
- Public Comment

Introductions

City of Long Beach Development Services, Planning Bureau

- Amy L. Harbin, Planner

CEQA Consultant Kimley-Horn

- Heidi Rous
- Chris Jones, AICP

Purpose of Scoping Meeting

- Introduce the Project
- Inform the public of the City's intent to prepare an Environmental Impact Report (EIR) in compliance with the California Environmental Quality Act (CEQA)
- Present an overview of the environmental review process
- Obtain public input on the environmental scope and content of the EIR

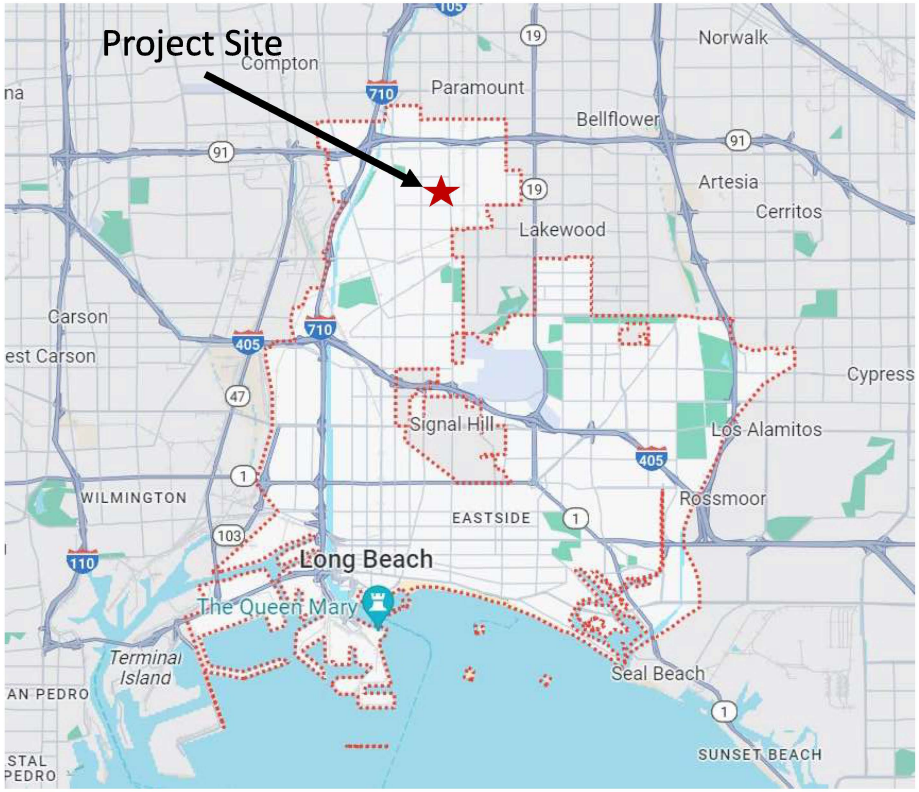
Project Overview

Introduction to the
5910 Cherry Avenue Industrial Building Project



LONGBEACH DEVELOPMENT SERVICES | CITY OF LONGBEACH

Project Overview



- Project is in North Long Beach
- Cherry Avenue between Harding Street and South Street

LONGBEACH DEVELOPMENT SERVICES | CITY OF LONGBEACH

Project Overview

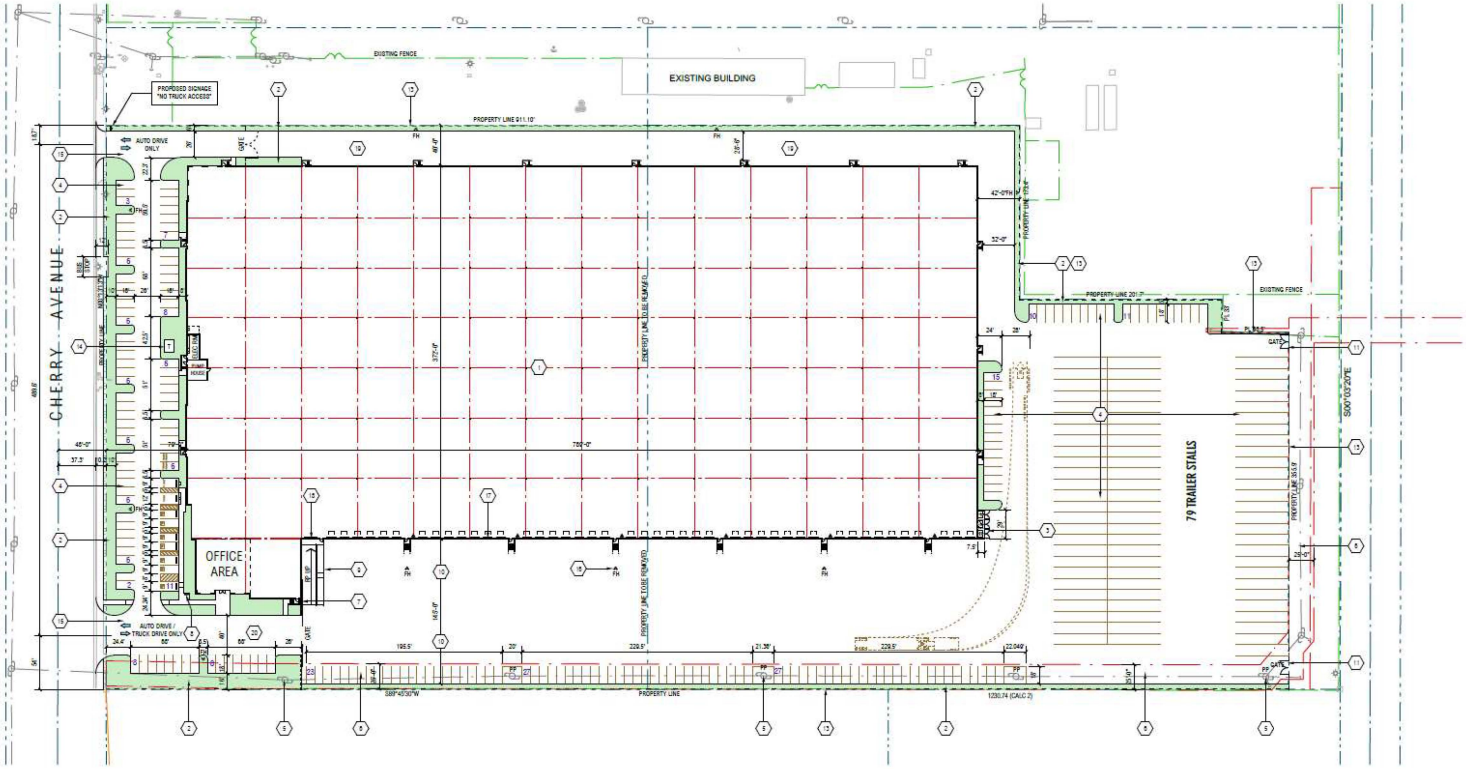


- Property is 14.16 acres
- Zoned (IG) General Industrial/Designated Neo-Industrial (NI) in the General Plan
- Property contains a single-story office building and several smaller buildings and sheds
- Was primarily used for office, storage, and repair purposes
- Property is currently underutilized, with only portions of the site occupied by active tenants

LONGBEACH DEVELOPMENT SERVICES | CITY OF LONGBEACH

Project Overview

- Demolish existing facilities
- Construct new 304,344 sq. ft. tilt-up concrete industrial building
  - Approximately 10,066 sq. ft. office space
  - Up to 44 truck bays
- Parking for up to:
  - 79 truck/trailers
  - 338 vehicles
- Landscaping



LONGBEACH DEVELOPMENT SERVICES | CITY OF LONGBEACH

Project Overview

Project Objectives

- To redevelop an underutilized heavy industrial site with a new industrial building that will contribute to the economic well-being of the community.
- To promote development that will generate both short-term and long-term employment opportunities for the community by increasing the number of high-quality local jobs.
- To redevelop an underutilized parcel with a new industrial building that will result in increased business to the City.
- To support development of a new industrial building that will attract high-quality tenants and that will be competitive with similar facilities across the region.
- To encourage development that derives benefit from the local transportation network and the proximity of the Ports of Long Beach and Los Angeles.

CEQA Process



- Scoping period
- Scoping meeting
- Collect public and agency input

- Prepare technical studies
- Prepare Draft EIR

- Submit for public and agency review
- Respond to public and agency comments
- Prepare Final EIR

- Consider EIR and all comments
- Consider Project

CEQA Process

EIR Contents

- An EIR is a public disclosure document that analyzes potential environmental effects of a proposed project:
  - Short-term and long-term environmental impacts (construction and operation)
  - Direct and indirect impacts
  - Cumulative impacts
- Mitigation measures to reduce or avoid potential environmental impacts
- Project Alternatives

CEQA Process

Environmental Topics

- Aesthetics
- Agriculture
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards & Hazardous Materials
- Hydrology & Water Quality
- Land Use Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

Project Schedule

- Scoping Comments Due ……November 10, 2023
- Prepare Draft EIR and Tech Reports…….Autumn-Winter 2023
- EIR Available for 45-day Public Review…….Spring 2024
- City Consideration of Project……Summer 2024

LONGBEACH DEVELOPMENT SERVICES | CITY OF LONGBEACH

Public Comment

- We want to hear from you – and everyone else – so please be respectful of everyone's time.
- Submitting your comments in writing is the best way to be sure we don't miss anything.

Thank you for participating!

Public Comment

- *Submit Written Comments By:*

  Friday, November 10, 2023

- *Send Comments To:*

  City of Long Beach
  Department of Development Services, Planning Bureau
  Amy L. Harbin, Planner
  411 W. Ocean Boulevard, 3rd Floor
  Long Beach, CA 90802

  LBDS-EIR-Comments@longbeach.gov

LONGBEACH DEVELOPMENT SERVICES | CITY OF LONGBEACH

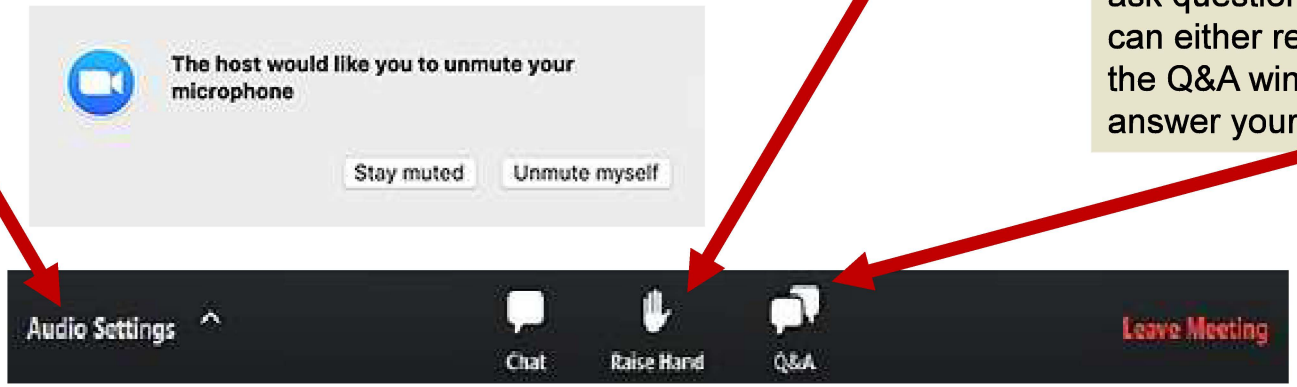
Public Comment

Audio Settings: Change your audio settings. You can also click the upward arrow (^) next to change your speaker.

Unmute/Mute: When the host gives you permission, you can unmute and all participants will be able to hear you talk. If the host allows you to talk, you will receive this notification - **click "unmute myself"**

Raise Hand: Raise your hand in the webinar to indicate that you want to make a comment.

Question & Answer: Open the Q&A window, allowing you to ask questions. The hosts can either reply via text in the Q&A window or answer your question live.



LONGBEACH DEVELOPMENT SERVICES | CITY OF LONGBEACH

Attachment 5:
Comment Letters Received

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Sara Dutschke
Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Laurena Bolden
Serrano

COMMISSIONER
Reid Milanovich
Cahuilla

COMMISSIONER
Vacant

EXECUTIVE SECRETARY
Raymond C. Hitchcock
Miwok, Nisenan

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

October 13, 2023

Amy L. Harbin
City of Long Beach, Department of Development Services, Planning Bureau
411 W. Ocean Boulevard, 3rd Floor
Long Beach, CA 90802

Re: 2023100342, 5910 Cherry Avenue Industrial Building Project, Los Angeles County

Dear Ms. Harbin:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

- **a.** A brief description of the project.
- **b.** The lead agency contact information.
- **c.** Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
- **d.** A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)):

- **a.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- **a.** Alternatives to the project.
- **b.** Recommended mitigation measures.
- **c.** Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:

- **a.** Type of environmental review necessary.
- **b.** Significance of the tribal cultural resources.
- **c.** Significance of the project's impacts on tribal cultural resources.
- **d.** If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

- **a.** Whether the proposed project has a significant impact on an identified tribal cultural resource.
- **b.** Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:

a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or

b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

a. Avoidance and preservation of the resources in place, including, but not limited to:

i. Planning and construction to avoid the resources and protect the cultural and natural context.

ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

i. Protecting the cultural character and integrity of the resource.

ii. Protecting the traditional use of the resource.

iii. Protecting the confidentiality of the resource.

c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).

e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).

f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.

b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
    a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (https://ohp.parks.ca.gov/?page_id=30331) for an archaeological records search. The records search will determine:
    a. If part or all of the APE has been previously surveyed for cultural resources.
    b. If any known cultural resources have already been recorded on or adjacent to the APE.
    c. If the probability is low, moderate, or high that cultural resources are located in the APE.
    d. If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
    b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
   a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
   b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
   a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
   b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
   c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green

Andrew Green
Cultural Resources Analyst

cc: State Clearinghouse

ROB BONTA
Attorney General

State of California
DEPARTMENT OF JUSTICE

1300 I STREET, SUITE 125
P.O. BOX 944255
SACRAMENTO, CA 94244-2550

E-Mail: EJ@doj.ca.gov

October 17, 2023

Amy L. Harbin, Planner
City of Long Beach
411 Ocean Blvd., 3rd Floor
Long Beach, CA 90802

RE: 5910 Cherry Avenue Industrial Building Project, SCH #2023100342

Dear Ms. Harbin:

Thank you for the opportunity to provide comments on the Notice of Preparation for the 5910 Cherry Avenue Industrial Building Project. While the logistics industry is an important component of our modern economy, warehouses can bring various environmental impacts to the communities where they are located. For example, diesel trucks visiting warehouses emit nitrogen oxide (NO_x)—a primary precursor to smog formation and a significant factor in the development of respiratory problems like asthma, bronchitis, and lung irritation—and diesel particulate matter (a subset of fine particular matter that is smaller than 2.5 micrometers)—a contributor to cancer, heart disease, respiratory illnesses, and premature death.[1] Trucks and on-site loading activities can also be loud, bringing disruptive noise levels during 24/7 operation that can cause hearing damage after prolonged exposure.[2] The hundreds, and sometimes thousands, of daily truck and passenger car trips that warehouses generate can contribute to traffic jams, deterioration of road surfaces, traffic accidents, and unsafe conditions for pedestrians and bicyclists. Depending on the circumstances of an individual project, warehouses may also have other environmental impacts.

To help lead agencies avoid, analyze, and mitigate warehouses' environmental impacts, the Attorney General Office's Bureau of Environmental Justice has published a document containing best practices and mitigation measures for warehouse projects. We have attached a

[1] California Air Resources Board, Nitrogen Dioxide & Health, https://ww2.arb.ca.gov/resources/nitrogen-dioxide-and-health (NOx); California Air Resources Board, Summary: Diesel Particular Matter Health Impacts, https://ww2.arb.ca.gov/resources/summary-diesel-particulate-matter-health-impacts; Office of Environmental Health Hazard Assessment and American Lung Association of California, Health Effects of Diesel Exhaust, https://oehha.ca.gov/media/downloads/calenviroscreen/indicators/diesel4-02.pdf (DPM).

[2] Noise Sources and Their Effects, https://www.chem.purdue.edu/chemsafety/Training/PPETrain/dblevels.htm (a diesel truck moving 40 miles per hour, 50 feet away, produces 84 decibels of sound).

copy of this document to this letter, and it is also available online.[3] We encourage you to consider the information in this document as you prepare the draft environmental impact report for this project.

Priority should be placed on avoiding land use conflicts between warehouses and sensitive receptors and on mitigating the impacts of any unavoidable land use conflicts. However, even projects located far from sensitive receptors may contribute to harmful regional air pollution, so you should consider measures to reduce emissions associated with the project to help the State meet its air quality goals. A distant warehouse may also impact sensitive receptors if trucks must pass near sensitive receptors to visit the warehouse.

The Bureau will continue to monitor proposed warehouse projects for compliance with the California Environmental Quality Act and other laws. We are available to discuss as you prepare the draft environmental impact report and consider how to guide warehouse development in your jurisdiction. Please do not hesitate to contact the Environmental Justice Bureau at ej@doj.ca.gov if you have any questions.

Sincerely,



CHRISTIE VOSBURG
Supervising Deputy Attorney General

For ROB BONTA
Attorney General

[3] https://oag.ca.gov/system/files/media/warehouse-best-practices.pdf.

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ROB BONTA
Attorney General

State of California
DEPARTMENT OF JUSTICE

Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act

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In carrying out its duty to enforce laws across California, the California Attorney General's Bureau of Environmental Justice (Bureau)[1] regularly reviews proposed warehouse projects for compliance with the California Environmental Quality Act (CEQA) and other laws. When necessary, the Bureau submits comment letters to lead agencies regarding warehouse projects, and in rare cases the Bureau has filed litigation to enforce CEQA.[2] This document builds upon the Bureau's work on warehouse projects, collecting information gained from the Bureau's review of hundreds of warehouse projects across the state.[3] It is meant to help lead agencies pursue CEQA compliance and promote environmentally-just development as they confront warehouse project proposals.[4] While CEQA analysis is necessarily project-specific, this document provides information on feasible best practices and mitigation measures, nearly all of which have been adapted from actual warehouse projects in California.

I. Background

In recent years, the proliferation of e-commerce and rising consumer expectations of rapid shipping have contributed to a boom in warehouse development.[5] California, with its ports, population centers, and transportation network, has found itself at the center of this trend. In 2020, the Ports of Los Angeles, Long Beach, and Oakland collectively accounted for over 34% of all United States international container trade.[6] The Ports of Los Angeles and Long Beach alone generate about 35,000 container truck trips every day.[7] Accordingly, the South Coast Air Basin now contains approximately 3,000 warehouses of over 100,000 square feet each, with a total warehouse capacity of approximately 700 million square feet, an increase of 20 percent over the last five years.[8] This trend has only accelerated, with e-commerce growing to

[1] https://oag.ca.gov/environment/justice.
[2] https://oag.ca.gov/environment/ceqa; *People of the State of California v. City of Fontana* (Super. Ct. San Bernardino County, No. CIVSB2121829); *South Central Neighbors United et al. v. City of Fresno et al.* (Super. Ct. Fresno County, No. 18CECG00690).
[3] This September 2022 version revises and replaces the prior March 2021 version of this document.
[4] Anyone reviewing this document to determine CEQA compliance responsibilities should consult their own attorney for legal advice.
[5] As used in this document, "warehouse" or "logistics facility" is defined as a facility consisting of one or more buildings that stores cargo, goods, or products on a short- or long-term basis for later distribution to businesses and/or retail customers.
[6] Data from the Bureau of Transportation Statistics, Container TEUs (Twenty-foot Equivalent Units) (2020), https://data.bts.gov/stories/s/Container-TEU/x3fb-aeda/ (Ports of Los Angeles, Long Beach, and Oakland combined for 14.157 million TEUs, 34% of 41.24 million TEUs total nationwide) (last accessed September 18, 2022).
[7] U.S. Dept. of Transportation, Federal Highway Administration, *FHWA Operations Support – Port Peak Pricing Program Evaluation* (2020), available at https://ops.fhwa.dot.gov/publications/fhwahop09014/sect2.htm (last accessed September 18, 2022).
[8] South Coast Air Qual. Mgmt. Dist., *Final Socioeconomic Assessment for Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program and Proposed Rule 316 – Fees for Rule 2305*, at 7-8, 41 (May 2021).

13% of all retail sales and 2021 being a second consecutive record year for new warehouse space leased.[9] The latest data and forecasts predict that the next wave of warehouse development will be in the Central Valley.[10]

When done properly, these activities can contribute to the economy and consumer welfare. However, imprudent warehouse development can harm local communities and the environment. Among other pollutants, diesel trucks visiting warehouses emit nitrogen oxide (NO_x)—a primary precursor to smog formation and a significant factor in the development of respiratory problems like asthma, bronchitis, and lung irritation—and diesel particulate matter (a subset of fine particular matter that is smaller than 2.5 micrometers)—a contributor to cancer, heart disease, respiratory illnesses, and premature death.[11] Trucks and on-site loading activities can also be loud, bringing disruptive noise levels during 24/7 operation that can cause hearing damage after prolonged exposure.[12] The hundreds, and sometimes thousands, of daily truck and passenger car trips that warehouses generate contribute to traffic jams, deterioration of road surfaces, and traffic accidents.

These environmental impacts also tend to be concentrated in neighborhoods already suffering from disproportionate health impacts and systemic vulnerability. For example, a comprehensive study by the South Coast Air Quality Management District found that communities located near large warehouses scored far higher on California's environmental justice screening tool, which measures overall pollution and demographic vulnerability.[13] That

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[9] U.S. Census Bureau News, Quarterly Retail E-Commerce Sales 4th Quarter 2021 (February 22, 2022), https://www.census.gov/retail/mrts/www/data/pdf/ec_current.pdf (last accessed September 18, 2022); CBRE Research, *2022 North America Industrial Big Box Report: Review and Outlook*, at 2-3 (March 2022), *available at* https://www.cbre.com/insights/reports/2022-north-america-industrial-big-box#download-report (last accessed September 18, 2022).

[10] CBRE Research, *supra note* 9, at 4, 36; New York Times, *Warehouses Are Headed to the Central Valley, Too* (Jul. 22, 2020), *available* at https://www.nytimes.com/2020/07/22/us/coronavirus-ca-warehouse-workers.html.

[11] California Air Resources Board, Nitrogen Dioxide & Health, https://ww2.arb.ca.gov/resources/nitrogen-dioxide-and-health (last accessed September 18, 2022) (NOx); California Air Resources Board, Summary: Diesel Particular Matter Health Impacts, https://ww2.arb.ca.gov/resources/summary-diesel-particulate-matter-health-impacts (last accessed September 18, 2022); Office of Environmental Health Hazard Assessment and American Lung Association of California, Health Effects of Diesel Exhaust, https://oehha.ca.gov/media/downloads/calenviroscreen/indicators/diesel4-02.pdf (last accessed September 18, 2022) (DPM).

[12] Noise Sources and Their Effects, https://www.chem.purdue.edu/chemsafety/Training/PPETrain/dblevels.htm (last accessed September 18, 2022) (a diesel truck moving 40 miles per hour, 50 feet away, produces 84 decibels of sound).

[13] South Coast Air Quality Management District, "Final Socioeconomic Assessment for Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program and Proposed Rule 316 – Fees for Rule 2305" (May 2021), at 4-5.

study concluded that, compared to the South Coast Air Basin averages, communities in the South Coast Air Basin near large warehouses had a substantially higher proportion of people of color; were exposed to more diesel particulate matter; had higher rates of asthma, cardiovascular disease, and low birth weights; and had higher poverty and unemployment rates.[14] Each area has its own unique history, but many of these impacts and vulnerabilities reflect historic redlining practices in these communities, which devalued land and concentrated poverty, racial outgroups, and pollution into designated areas.[15]

II. Proactive Planning: General Plans, Local Ordinances, and Good Neighbor Policies

To systematically guide warehouse development, we encourage local governing bodies to proactively plan for logistics projects in their jurisdictions. Proactive planning allows jurisdictions to prevent land use conflicts before they materialize and direct sustainable development. Benefits also include providing a predictable business environment, protecting residents from environmental harm, and setting consistent expectations jurisdiction-wide.

Proactive planning can take many forms. Land use designation and zoning decisions should channel development into appropriate areas. For example, establishing industrial districts near major highway and rail corridors but away from sensitive receptors[16] can help attract investment while avoiding conflicts between warehouse facilities and residential communities. Transition zones with lighter industrial and commercial land uses may also help minimize conflicts between residential and industrial uses.

In addition, general plan policies, local ordinances, and good neighbor policies should set minimum standards for logistics projects. General plan policies can be incorporated into existing economic development, land use, circulation, or other related general plan elements. Many jurisdictions alternatively choose to consolidate policies in a separate environmental justice element. Adopting general plan policies to guide warehouse development may also help

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[14] *Id*. at 5-7.

[15] Beginning in the 1930s, federal housing policy directed investment away from Black, immigrant, and working-class communities by color-coding neighborhoods according to the purported "riskiness" of loaning to their residents. In California cities where such "redlining" maps were drawn, nearly all of the communities where warehouses are now concentrated were formerly coded "red," signifying the least desirable areas where investment was to be avoided. *See* University of Richmond Digital Scholarship Lab, Mapping Inequality, https://dsl.richmond.edu/panorama/redlining/#loc=12/33.748/-118.272&city=los-angeles-ca (Los Angeles), https://dsl.richmond.edu/panorama/redlining/#loc=13/32.685/-117.132&city=san-diego-ca (San Diego), https://dsl.richmond.edu/panorama/redlining/#loc=11/37.81/-122.38&city=oakland-ca (Oakland), https://dsl.richmond.edu/panorama/redlining/#loc=13/37.956/-121.326&city=stockton-ca (Stockton), https://dsl.richmond.edu/panorama/redlining/#loc=12/36.751/-119.86&city=fresno-ca (Fresno) (all last accessed September 18, 2022).

[16] In this document, "sensitive receptors" refers to residences, schools, public recreation facilities, health care facilities, places of worship, daycare facilities, community centers, or incarceration facilities.

jurisdictions comply with their obligations under SB 1000, which requires local government general plans to identify objectives and policies to reduce health risks in disadvantaged communities, promote civil engagement in the public decision making process, and prioritize improvements and programs that address the needs of disadvantaged communities.[17]

Local ordinances and good neighbor policies that set development standards for all warehouses in the jurisdiction are a critical and increasingly common tool that serve several goals. When well-designed, these ordinances direct investment to local improvements, provide predictability for developers, conserve government resources by streamlining project review processes, and reduce the environmental impacts of industrial development. While many jurisdictions have adopted warehouse-specific development standards, an ordinance in the City of Fontana provides an example to review and build upon.[18] Good neighbor policies in Riverside County and by the Western Riverside Council of Government include additional measures worth consideration.[19]

The Bureau encourages jurisdictions to adopt their own local ordinances that combine the strongest policies from those models with measures discussed in the remainder of this document.

III. Community Engagement

Early and consistent community engagement is central to establishing good relationships between communities, lead agencies, and warehouse developers and tenants. Robust community engagement can give lead agencies access to community residents' on-the-ground knowledge and information about their concerns, build community support for projects, and develop creative solutions to ensure new logistics facilities are mutually beneficial. Examples of best practices for community engagement include:

- Holding a series of community meetings at times and locations convenient to members of the affected community and incorporating suggestions into the project design.
- Posting information in hard copy in public gathering spaces and on a website about the project. The information should include a complete, accurate project description, maps and drawings of the project design, and information about how the public can provide input and be involved in the project approval process. The

[17] For more information about SB 1000, *see* https://oag.ca.gov/environment/sb1000.
[18] https://oag.ca.gov/system/files/attachments/press-docs/Final%20Signed%20Fontana%20Ordinance.pdf (last accessed September 18, 2022).
[19] For example, the Riverside County policy requires community benefits agreements and supplemental funding contributions toward additional pollution offsets, and the Western Riverside Council of Governments policy sets a minimum buffer zone of 300 meters between warehouses and sensitive receptors. https://www.rivcocob.org/wp-content/uploads/2020/01/Good-Neighbor-Policy-F-3-Final-Adopted.pdf (last accessed September 18, 2022) (Riverside County); http://www.wrcog.cog.ca.us/DocumentCenter/View/318/Good-Neighbor-Guidelines-for-Siting-Warehouse-Distribution-Facilities-PDF?bidId= (last accessed September 18, 2022) (Western Riverside Council of Governments).

information should be in a format that is easy to navigate and understand for members of the affected community.

- Providing notice by mail to residents and schools within a certain radius of the project and along transportation corridors to be used by vehicles visiting the project, and by posting a prominent sign on the project site. The notice should include a brief project description and directions for accessing complete information about the project and for providing input on the project.
- Providing translation or interpretation in residents' native language, where appropriate.
- For public meetings broadcast online or otherwise held remotely, providing for access and public comment by telephone and supplying instructions for access and public comment with ample lead time prior to the meeting.
- Partnering with local community-based organizations to solicit feedback, leverage local networks, co-host meetings, and build support.
- Considering adoption of a community benefits agreement, negotiated with input from affected residents and businesses, by which the developer provides benefits to the affected community.
- Creating a community advisory board made up of local residents to review and provide feedback on project proposals in early planning stages.
- Identifying a person to act as a community liaison concerning on-site construction activity and operations, and providing contact information for the community liaison to the surrounding community.
- Requiring signage in public view at warehouse facilities with contact information for a local designated representative for the facility operator who can receive community complaints, and requiring any complaints to be answered by the facility operator within 48 hours of receipt.

IV. Warehouse Siting and Design Considerations

The most important consideration when planning a logistics facility is its location. Warehouses located in residential neighborhoods or near sensitive receptors expose community residents and those using or visiting sensitive receptor sites to the air pollution, noise, traffic, and other environmental impacts they generate. Therefore, placing facilities away from sensitive receptors significantly reduces their environmental and quality of life harms on local communities. The suggested best practices for siting and design of warehouse facilities does not relieve lead agencies' responsibility under CEQA to conduct a project-specific analysis of the project's impacts and evaluation of feasible mitigation measures and alternatives; lead agencies' incorporation of the best practices must be part of the impact, mitigation and alternatives analyses to meet the requirements of CEQA. Examples of best practices when siting and designing warehouse facilities include:

- Per California Air Resources Board (CARB) guidance, siting warehouse facilities so that their property lines are at least 1,000 feet from the property lines of the nearest sensitive receptors.[20]
- Providing adequate amounts of on-site parking to prevent trucks and other vehicles from parking or idling on public streets and to reduce demand for off-site truck yards.
- Establishing setbacks from the property line of the nearest sensitive receptor to warehouse dock doors, loading areas, and truck drive aisles, and locating warehouse dock doors, loading areas, and truck drive aisles on the opposite side of the building from the nearest sensitive receptors—e.g., placing dock doors on the north side of the facility if sensitive receptors are near the south side of the facility.
- Placing facility entry and exit points from the public street away from sensitive receptors—e.g., placing these points on the north side of the facility if sensitive receptors are adjacent to the south side of the facility.
- Ensuring heavy duty trucks abide by the on-site circulation plans by constructing physical barriers to block those trucks from using areas of the project site restricted to light duty vehicles or emergency vehicles only.
- Preventing truck queuing spillover onto surrounding streets by positioning entry gates after a minimum of 140 feet of space for queuing, and increasing the distance by 70 feet for every 20 loading docks beyond 50 docks.
- Locating facility entry and exit points on streets of higher commercial classification that are designed to accommodate heavy duty truck usage.
- Screening the warehouse site perimeter and onsite areas with significant truck traffic (e.g., dock doors and drive aisles) by creating physical, structural, and/or vegetative buffers that prevent or substantially reduce pollutant and noise dispersion from the facility to sensitive receptors.
- Planting exclusively 36-inch box evergreen trees to ensure faster maturity and four-season foliage.
- Requiring all property owners and successors in interest to maintain onsite trees and vegetation for the duration of ownership, including replacing any dead or unhealthy trees and vegetation.
- Posting signs clearly showing the designated entry and exit points from the public street for trucks and service vehicles.
- Including signs and drive aisle pavement markings that clearly identify onsite circulation patterns to minimize unnecessary onsite vehicle travel.
- Posting signs indicating that all parking and maintenance of trucks must be conducted within designated on-site areas and not within the surrounding community or public streets.

[20] CARB, Air Quality and Land Use Handbook: A Community Health Perspective (April 2005), at ES-1. CARB staff has released draft updates to this siting and design guidance which suggests a greater distance may be warranted in some scenarios. CARB, Concept Paper for the Freight Handbook (December 2019), *available at* https://ww2.arb.ca.gov/sites/default/files/2020-03/2019.12.12%20-%20Concept%20Paper%20for%20the%20Freight%20Handbook_1.pdf (last accessed September 18, 2022).

V. Air Quality and Greenhouse Gas Emissions Analysis and Mitigation

Emissions of air pollutants and greenhouse gases are often among the most substantial environmental impacts from new warehouse facilities. CEQA compliance demands a proper accounting of the full air quality and greenhouse gas impacts of logistics facilities and adoption of all feasible mitigation of significant impacts. Although efforts by CARB and other authorities to regulate the heavy-duty truck and off-road diesel fleets have made excellent progress in reducing the air quality impacts of logistics facilities, the opportunity remains for local jurisdictions to further mitigate these impacts at the project level. Lead agencies and developers should also consider designing projects with their long-term viability in mind. Constructing the necessary infrastructure to prepare for the zero-emission future of goods movement not only reduces a facility's emissions and local impact now, but it can also save money as demand for zero-emission infrastructure grows. In planning new logistics facilities, the Bureau strongly encourages developers to consider the local, statewide, and global impacts of their projects' emissions.

Examples of best practices when studying air quality and greenhouse gas impacts include:

- Fully analyzing all reasonably foreseeable project impacts, including cumulative impacts. In general, new warehouse developments are not ministerial under CEQA because they involve public officials' personal judgment as to the wisdom or manner of carrying out the project, even when warehouses are permitted by a site's applicable zoning and/or general plan land use designation.[21]
- When analyzing cumulative impacts, thoroughly considering the project's incremental impact in combination with past, present, and reasonably foreseeable future projects, even if the project's individual impacts alone do not exceed the applicable significance thresholds.
- Preparing a quantitative air quality study in accordance with local air district guidelines.
- Preparing a quantitative health risk assessment in accordance with California Office of Environmental Health Hazard Assessment and local air district guidelines.
- Refraining from labeling compliance with CARB or air district regulations as a mitigation measure—compliance with applicable regulations is required regardless of CEQA.
- Disclosing air pollution from the entire expected length of truck trips. CEQA requires full public disclosure of a project's anticipated truck trips, which entails calculating truck trip length based on likely truck trip destinations, rather than the distance from the facility to the edge of the air basin, local jurisdiction, or other truncated endpoint. All air pollution associated with the project must be considered, regardless of where those impacts occur.

[21] CEQA Guidelines § 15369.

- Accounting for all reasonably foreseeable greenhouse gas emissions from the project, without discounting projected emissions based on participation in California's Cap-and-Trade Program.

Examples of measures to mitigate air quality and greenhouse gas impacts from construction are below. To ensure mitigation measures are enforceable and effective, they should be imposed as permit conditions on the project where applicable.

- Requiring off-road construction equipment to be hybrid electric-diesel or zero-emission, where available, and all diesel-fueled off-road construction equipment to be equipped with CARB Tier IV-compliant engines or better, and including this requirement in applicable bid documents, purchase orders, and contracts, with successful contractors demonstrating the ability to supply the compliant construction equipment for use prior to any ground-disturbing and construction activities.
- Prohibiting off-road diesel-powered equipment from being in the "on" position for more than 10 hours per day.
- Using electric-powered hand tools, forklifts, and pressure washers, and providing electrical hook ups to the power grid rather than use of diesel-fueled generators to supply their power.
- Designating an area in the construction site where electric-powered construction vehicles and equipment can charge.
- Limiting the amount of daily grading disturbance area.
- Prohibiting grading on days with an Air Quality Index forecast of greater than 100 for particulates or ozone for the project area.
- Forbidding idling of heavy equipment for more than three minutes.
- Keeping onsite and furnishing to the lead agency or other regulators upon request, all equipment maintenance records and data sheets, including design specifications and emission control tier classifications.
- Conducting an on-site inspection to verify compliance with construction mitigation and to identify other opportunities to further reduce construction impacts.
- Using paints, architectural coatings, and industrial maintenance coatings that have volatile organic compound levels of less than 10 g/L.
- Providing information on transit and ridesharing programs and services to construction employees.
- Providing meal options onsite or shuttles between the facility and nearby meal destinations for construction employees.

Examples of measures to mitigate air quality and greenhouse gas impacts from operation include:

- Requiring all heavy-duty vehicles engaged in drayage[22] to or from the project site to be zero-emission beginning in 2030.

[22] "Drayage" refers generally to transport of cargo to or from a seaport or intermodal railyard.

- Requiring all on-site motorized operational equipment, such as forklifts and yard trucks, to be zero-emission with the necessary charging or fueling stations provided.
- Requiring tenants to use zero-emission light- and medium-duty vehicles as part of business operations.
- Forbidding trucks from idling for more than three minutes and requiring operators to turn off engines when not in use.
- Posting both interior- and exterior-facing signs, including signs directed at all dock and delivery areas, identifying idling restrictions and contact information to report violations to CARB, the local air district, and the building manager.
- Installing solar photovoltaic systems on the project site of a specified electrical generation capacity that is equal to or greater than the building's projected energy needs, including all electrical chargers.
- Designing all project building roofs to accommodate the maximum future coverage of solar panels and installing the maximum solar power generation capacity feasible.
- Constructing zero-emission truck charging/fueling stations proportional to the number of dock doors at the project.
- Running conduit to designated locations for future electric truck charging stations.
- Unless the owner of the facility records a covenant on the title of the underlying property ensuring that the property cannot be used to provide refrigerated warehouse space, constructing electric plugs for electric transport refrigeration units at every dock door and requiring truck operators with transport refrigeration units to use the electric plugs when at loading docks.
- Oversizing electrical rooms by 25 percent or providing a secondary electrical room to accommodate future expansion of electric vehicle charging capability.
- Constructing and maintaining electric light-duty vehicle charging stations proportional to the number of employee parking spaces (for example, requiring at least 10% of all employee parking spaces to be equipped with electric vehicle charging stations of at least Level 2 charging performance)
- Running conduit to an additional proportion of employee parking spaces for a future increase in the number of electric light-duty charging stations.
- Installing and maintaining, at the manufacturer's recommended maintenance intervals, air filtration systems at sensitive receptors within a certain radius of facility for the life of the project.
- Installing and maintaining, at the manufacturer's recommended maintenance intervals, an air monitoring station proximate to sensitive receptors and the facility for the life of the project, and making the resulting data publicly available in real time. While air monitoring does not mitigate the air quality or greenhouse gas impacts of a facility, it nonetheless benefits the affected community by providing information that can be used to improve air quality or avoid exposure to unhealthy air.
- Requiring all stand-by emergency generators to be powered by a non-diesel fuel.
- Requiring facility operators to train managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of

trucks.

- Requiring operators to establish and promote a rideshare program that discourages single-occupancy vehicle trips and provides financial incentives for alternate modes of transportation, including carpooling, public transit, and biking.
- Meeting CalGreen Tier 2 green building standards, including all provisions related to designated parking for clean air vehicles, electric vehicle charging, and bicycle parking.
- Designing to LEED green building certification standards.
- Providing meal options onsite or shuttles between the facility and nearby meal destinations.
- Posting signs at every truck exit driveway providing directional information to the truck route.
- Improving and maintaining vegetation and tree canopy for residents in and around the project area.
- Requiring that every tenant train its staff in charge of keeping vehicle records in diesel technologies and compliance with CARB regulations, by attending CARB-approved courses. Also require facility operators to maintain records on-site demonstrating compliance and make records available for inspection by the local jurisdiction, air district, and state upon request.
- Requiring tenants to enroll in the United States Environmental Protection Agency's SmartWay program, and requiring tenants who own, operate, or hire trucking carriers with more than 100 trucks to use carriers that are SmartWay carriers.
- Providing tenants with information on incentive programs, such as the Carl Moyer Program and Voucher Incentive Program, to upgrade their fleets.

VI. Noise Impacts Analysis and Mitigation

The noise associated with logistics facilities can be among their most intrusive impacts to nearby sensitive receptors. Various sources, such as unloading activity, diesel truck movement, and rooftop air conditioning units, can contribute substantial noise pollution. These impacts are exacerbated by logistics facilities' typical 24-hour, seven-days-per-week operation. Construction noise is often even greater than operational noise, so if a project site is near sensitive receptors, developers and lead agencies should adopt measures to reduce the noise generated by both construction and operation activities.

Examples of best practices when studying noise impacts include:

- Preparing a noise impact analysis that considers all reasonably foreseeable project noise impacts, including to nearby sensitive receptors. All reasonably foreseeable project noise impacts encompasses noise from both construction and operations, including stationary, on-site, and off-site noise sources.
- Adopting a lower significance threshold for incremental noise increases when baseline noise already exceeds total noise significance thresholds, to account for the cumulative impact of additional noise and the fact that, as noise moves up the decibel scale, each decibel increase is a progressively greater increase in sound

pressure than the last. For example, 70 dBA is ten times more sound pressure than 60 dBA.

- Disclosing and considering the significance of short-term noise levels associated with all aspects of project operation (i.e. both on-site noise generation and off-site truck noise). Considering only average noise levels may mask noise impacts sensitive receptors would consider significant—for example, the repeated but short-lived passing of individual trucks or loading activities at night.

Examples of measures to mitigate noise impacts include:

- Constructing physical, structural, or vegetative noise barriers on and/or off the project site.
- Planning and enforcing truck routes that avoid passing sensitive receptors.
- Locating or parking all stationary construction equipment as far from sensitive receptors as possible, and directing emitted noise away from sensitive receptors.
- Verifying that construction equipment has properly operating and maintained mufflers.
- Requiring all combustion-powered construction equipment to be surrounded by a noise protection barrier
- Limiting operation hours to daytime hours on weekdays.
- Paving roads where truck traffic is anticipated with low noise asphalt.
- Orienting any public address systems onsite away from sensitive receptors and setting system volume at a level not readily audible past the property line.

VII. Traffic Impacts Analysis and Mitigation

Warehouse facilities inevitably bring truck and passenger car traffic. Truck traffic can present substantial safety issues. Collisions with heavy-duty trucks are especially dangerous for passenger cars, motorcycles, bicycles, and pedestrians. These concerns can be even greater if truck traffic passes through residential areas, school zones, or other places where pedestrians are common and extra caution is warranted.

Examples of measures to mitigate traffic impacts include:

- Designing, clearly marking, and enforcing truck routes that keep trucks out of residential neighborhoods and away from other sensitive receptors.
- Installing signs in residential areas noting that truck and employee parking is prohibited.
- Requiring preparation and approval of a truck routing plan describing the facility's hours of operation, types of items to be stored, and truck routing to and from the facility to designated truck routes that avoids passing sensitive receptors. The plan should include measures for preventing truck queuing, circling, stopping, and parking on public streets, such as signage, pavement markings, and queuing analysis and enforcement. The plan should hold facility operators responsible for violations of the truck routing plan, and a revised plan should be required from any new tenant that occupies the property before a business license

is issued. The approving agency should retain discretion to determine if changes to the plan are necessary, including any additional measures to alleviate truck routing and parking issues that may arise during the life of the facility.
- Constructing new or improved transit stops, sidewalks, bicycle lanes, and crosswalks, with special attention to ensuring safe routes to schools.
- Consulting with the local public transit agency and securing increased public transit service to the project area.
- Designating areas for employee pickup and drop-off.
- Implementing traffic control and safety measures, such as speed bumps, speed limits, or new traffic signs or signals.
- Placing facility entry and exit points on major streets that do not have adjacent sensitive receptors.
- Restricting the turns trucks can make entering and exiting the facility to route trucks away from sensitive receptors.
- Constructing roadway improvements to improve traffic flow.
- Preparing a construction traffic control plan prior to grading, detailing the locations of equipment staging areas, material stockpiles, proposed road closures, and hours of construction operations, and designing the plan to minimize impacts to roads frequented by passenger cars, pedestrians, bicyclists, and other non-truck traffic.

VIII. Other Significant Environmental Impacts Analysis and Mitigation

Warehouse projects may result in significant environmental impacts to other resources, such as to aesthetics, cultural resources, energy, geology, or hazardous materials. All significant adverse environmental impacts must be evaluated, disclosed and mitigated to the extent feasible under CEQA. Examples of best practices and mitigation measures to reduce environmental impacts that do not fall under any of the above categories include:

- Appointing a compliance officer who is responsible for implementing all mitigation measures, and providing contact information for the compliance officer to the lead agency, to be updated annually.
- Creating a fund to mitigate impacts on affected residents, schools, places of worship, and other community institutions by retrofitting their property. For example, retaining a contractor to retrofit/install HVAC and/or air filtration systems, doors, dual-paned windows, and sound- and vibration-deadening insulation and curtains.
- Sweeping surrounding streets on a daily basis during construction to remove any construction-related debris and dirt.
- Directing all lighting at the facility into the interior of the site.
- Using full cut-off light shields and/or anti-glare lighting.
- Requiring submission of a property maintenance program for agency review and approval providing for the regular maintenance of all building structures, landscaping, and paved surfaces.
- Using cool pavement to reduce heat island effects.

- Planting trees in parking areas to provide at least 35% shade cover of parking areas within fifteen years to reduce heat island impacts.
- Using light colored roofing materials with a solar reflective index of 78 or greater.
- Including on-site amenities, such as a truck operator lounge with restrooms, vending machines, and air conditioning, to reduce the need for truck operators to idle or travel offsite.
- Designing skylights to provide natural light to interior worker areas.
- Installing climate control and air filtration in the warehouse facility to promote worker well-being.

IX. Conclusion

California's world-class economy, ports, and transportation network position it at the center of the e-commerce and logistics industry boom. At the same time, California is a global leader in environmental protection and environmentally just development. The guidance in this document furthers these dual strengths, ensuring that all can access the benefits of economic development. The Bureau will continue to monitor proposed projects for compliance with CEQA and other laws. Lead agencies, developers, community advocates, and other interested parties should feel free to reach out to us as they consider how to guide warehouse development in their area.

Please do not hesitate to contact the Environmental Justice Bureau at ej@doj.ca.gov if you have any questions.

DEPARTMENT OF TRANSPORTATION
DISTRICT 7- OFFICE OF REGIONAL PLANNING
100 S. MAIN STREET, SUITE 100
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Making Conservation a California Way of Life.

October 25, 2023

Department of Development Services, Planning Bureau
ATTN: Amy L. Harbin, Planner
411 W. Ocean Boulevard, 3rd Floor
Long Beach, CA 90802

RE: 5910 Cherry Avenue Industrial Project – Notice of Preparation (NOP)
SCH# 2023100342
GTS# 07-LA-2023-04337
Vic. LA-91 PM R13.125

Dear Amy L. Harbin,

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The project is a single, approximately 304,344 sf, concrete, tilt-up industrial warehouse building. The proposed building would be 51 feet high and surrounded by parking areas that would include 338 at-grade parking stalls and 79 at-grade truck parking stalls. Passenger vehicle parking would be situated in front of the proposed building, along Cherry Avenue, along the south side of the lot, and in the rear of the building in the northeast corner of the lot. The building would feature 44-truck high-dock doors along the south elevation facing the abutting commercial site. Approximately 10,066 sf of office space would be accommodated in the southwest corner of the building along Cherry Avenue. The office space would be located on the first floor and mezzanine level of the proposed building. To prepare for redevelopment of the parcel with the proposed project, the existing 8 buildings would be demolished and removed from the project site. The proposed project improvements are consistent with the land use and development standards of the Industrial (IG) zoning district in which the project is situated.

The nearest State facility to the proposed project is State Route 91. After reviewing the NOP, Caltrans has the following comments:

With three hundred thousand square feet of new warehouse space, 417 new car/truck parking spaces, and 44 new loading dock doors, the 5910 Cherry Avenue Industrial Building Project will induce demand for a consequential amount of additional vehicle trips and vehicle miles travelled. Caltrans expects for the forthcoming DEIR to identify substantial infrastructure investments to mitigate the significant safety and environmental impacts that the Project is anticipated to produce.

Caltrans recommends the following:

- Reducing the amount of parking whenever possible. Research looking at the relationship between land-use, parking, and transportation indicates that the amount of car parking supplied can undermine a project's ability to encourage public transit and active modes of transportation.

- Invest in alternative modes of freight movement, such as rail, which is not only more efficient but also more easily converted to carbon neutral energy sources in the future.

- Due to the increased volume of truck trips, a substantial contribution should be made to a city fund that will build safer infrastructure for people walking, riding bikes, and taking transit throughout the city. The most effective methods to reduce pedestrian and bicyclist exposure to cars and trucks is through physical design and geometrics. These methods include the construction of physically separated facilities such as Class IV bike lanes, wide sidewalks, pedestrian refuge islands, landscaping, street furniture, and reductions in crossing distances through roadway narrowing.

Caltrans looks forward to reviewing the forthcoming Draft Environmental Impact Report (DEIR) to confirm that the project will result in a net reduction in Vehicle Miles Traveled (VMT).

Finally, any transportation of heavy construction equipment and/or materials which requires use of oversized-transport vehicles on State highways will require a Caltrans transportation permit. We recommend large size truck trips be limited to off-peak commute periods.

If you have any questions, please contact project coordinator Anthony Higgins, at anthony.higgins@dot.ca.gov and refer to GTS# 07-LA-2023-04337.

Sincerely,

Frances Duong for

MIYA EDMONSON
IGR/CEQA Branch Chief

cc: State Clearinghouse

Jones, ChrisP

From: Melanie Nazarbekian <MNazarbekian@lbschools.net>
Sent: Thursday, November 9, 2023 1:15 PM
To: Amy Harbin
Subject: RE: Notice Of Preparation -- Environmental Impact Report 5910 Cherry Avenue, Long Beach

-EXTERNAL-

Good afternoon Amy,

Please find below LBUSD comments. I know the deadline for comments is tomorrow, 11/10, so I wanted to get this over to you, however, we should have a signed letter for you on Monday.

1. Concerned about heavy traffic at nearby schools during dropoff/pickup times. How will this impact nearby schools? (Harte and Gant are roughly 4-6 miles away) Are they able to direct truck routes away from the schools?
2. Concerned about air quality implications to nearby schools as well based on the studies that will be included in the EIR. Please address this in the EIR. Will there be air quality mitigation measures implemented?
3. Please describe the type of activities and/or storage that will occur within the warehouse. It is unclear if the warehouse will house toxic chemicals for shipment for example.

Kindy confirm receipt.

Thanks,
Melanie

LONG BEACH UNIFIED SCHOOL DISTRICT
Excellence & Equity

Melanie Nazarbekian
Assistant Project Manager - Program
Long Beach USD – Facilities Development & Planning
Email: mnazarbekian@lbschools.net

From: Amy Harbin <Amy.Harbin@longbeach.gov>
Sent: Monday, October 9, 2023 8:31 AM
To: LBDS-EIR-Comments <LBDS-EIR-Comments@longbeach.gov>
Cc: Amy Harbin <Amy.Harbin@longbeach.gov>
Subject: Notice Of Preparation -- Environmental Impact Report 5910 Cherry Avenue, Long Beach

This message originated from outside the Long Beach Unified School District. Do NOT click links or open attachments unless you recognize the sender and know that the contents are safe.

Good morning!

Please see the attached Notice of Preparation of an Environmental Impact Report for the proposed industrial building at 5910 Cherry Avenue, Long Beach.

Comments are due to LBDS-EIR-Comments@longbeach.gov by no later than 4:30 P.M. on Friday, November 10, 2023.

Thank you and we look forward to receiving your comments.

Amy

Amy L. Harbin, AICP
Planner

Community Development | Planning Bureau
411 W. Ocean Blvd., 3rd Fl. | Long Beach, CA 90802
Office: 562.570.6872



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November 10, 2023

VIA EMAIL:

ATTN: Amy L. Harbin, Planner
Department of Development Services, Planning Bureau
City of Long Beach
LBDS-EIR-Comments@longbeach.gov

RE: NOP Comments for 5910 Cherry Avenue Industrial Building Project (SCH # 2023100342)

Dear Ms. Harbin:

On behalf of Kirk Davis, this office respectfully provides the following comments to the City of Long Beach ("**City**") in response to the Notice of Preparation ("**NOP**") of a forthcoming Draft Environmental Impact Report ("**EIR**") for the approximate 304,344 square foot, 44-dock warehouse building with 338-auto and 79-truck stalls ("**Project**") located at the above-referenced address ("**Site**").

First, as you know, this office represented Mr. Davis earlier this year in his "**Appeal**" of the Planning Commission's approval of a Site Plan Review ("**SPR**") for a substantial similar development at the Site (i.e., approx. 304,000 square foot warehouse) ("**Prior Project**"), that was subsequently withdrawn before the City Council acting on the Appeal. Central to the Appeal was the request that the City prepare an EIR to evaluate the Project's potential environmental impacts under the California Environmental Quality Act ("**CEQA**"). Mr. Davis is pleased that the City has elected to do so.

Next, as previously raised for the Prior Project, Mr. Davis has significant concerns about the potential impacts of the warehouse development on air quality, hazards, noise, traffic, vehicle miles traveled, greenhouse gas emissions, and possible inconsistency with applicable land use policies. These concerns were thoroughly discussed in previously submitted expert comment letters (attached hereto as Exhibits A through C) and other materials provided to the City,[1] *which are incorporated into this NOP comment letter in their entirety,* given the similarity to the current Project and Prior Project. We urge the City to fully address these issues in the forthcoming Draft EIR, including consideration of all feasible mitigation measures, such as those encouraged by the State Office of Policy and Research ("**OPR**"), the California Air Pollution Control Officers Association ("**CAPCOA**"), the Southern California Association of Government ("**SCAG**"), and the California Air Resources Board ("**CARB**").

Additionally, the *Draft EIR should consider more than just Code-required tree protection/replacement*. Code compliance alone may not reduce impacts to less than significance. (See *Californians for Alternatives to Toxics v. Department of Food and Agriculture* (2005) 136 Cal.App.4th 1, 17 ["[c]ompliance with the law is not enough to support a finding of no significant impact under the CEQA."]) The EIR should consider additional mitigation measures and alternatives that minimize tree removal (e.g., relocating/redesigning proposed structures, construction plans that reduce the need for grading and clearing) and promote native landscaping (e.g., relocating existing trees, tree replacement beyond Code requirements).

[1] See https://www.dropbox.com/s/4d6kve7jihdepvy/Appeal%20to%205910%20Cherry%20Site%20Plan%20Review%20V4%202.7.23%20.pptx?dl=0.

Furthermore, the *Draft EIR should consider the Site's ability to generate renewable energy*. CEQA requires considering unnecessary, wasteful use of energy resources. (See e.g., Pub. Res. Code § 21100(b)(3); CEQA Guidelines § 15126.2(b); *League to Save Lake Tahoe v. County of Placer* (2022) 75 Cal.App.5th 63, 167-168 [duty to investigate renewable energy option is required to determine whether project impacts on energy resources are significant].) This should include the consideration of the feasibility of generating onsite renewable energy (e.g., solar panels). It is not enough that the Site will comply with existing building laws (e.g., Title 24, CalGreen Code, etc.).

In closing, thank you for this opportunity to provide these NOP comments. We look forward to participating in the CEQA review process. This office *requests all notices concerning any CEQA/land use actions* involving the Project, Draft EIR, and any other project approvals as required under applicable law. (See e.g., Pub. Res. Code §§ 21092.2, 21167(f); Gov. Code § 65092.) Please send notice by *electronic and regular mail to (i) Mr. Davis and (ii) this office* (address already on file).

Sincerely,

Jordan R. Sisson
Attorney for Mr. Davis

Attachments:

Exhibit A: Expert Forrest & Associates Noise Comment Letter (3/30/23)[2]
Exhibit B: Expert Urban Systems Associated Traffic Comment Letter (4/5/23)[3]
Exhibit C: Expert SWAPE Air/GHG Comment Letter (4/3/23)[4]

[2] https://www.dropbox.com/s/3l2ficen3tjim8j/B_DLA%20Noise%20Report_Cherry%20Ave%20Warehouse%20Project%202-6-2023%20%207am-s-s.pdf?dl=0.
[3] https://www.dropbox.com/s/qrb1cnxv42gt4j2/C_5910%20Cherry_%20Long%20Beach_Transportation%20Comments.pdf?dl=0.
[4] https://www.dropbox.com/s/l848hw6l9grk6pj/D_2023.04.03_CherryAve_Commentletter_Final.pdf?dl=0.

EXHIBIT A

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March 30, 2023

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Report of Potential Noise Impacts of Cherry Avenue Warehouse Project
5910 Cherry Avenue, Long Beach, CA
Application No. 2207-30 (SPR 22-078)

Dear Mr. Sisson:

At your request, I have prepared this report in response to the Project application and Categorical Exemption Request ("CE Request") for the Cherry Avenue Warehouse ("Project"), including the cursory noise discussion in a Noise Study attachment pertaining to the Project's potentially significant noise impacts. My qualifications are attached hereto as "Attachment 1".

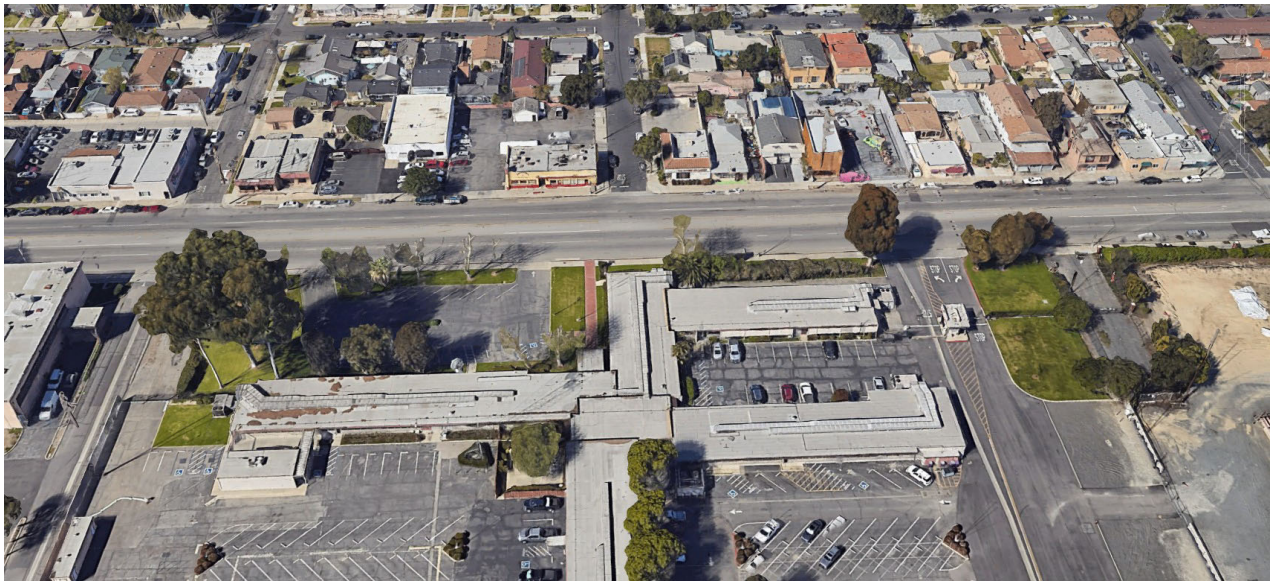
This report shows that the Project's noise impacts will be significantly adverse under the California Environmental Quality Act, Pub. Res. Code § 21000 *et seq*., ("CEQA") and will exceed permissible CEQA standards set by the City of Long Beach ("City") and other authorities.

During this Project's construction period, its construction noise levels will undoubtedly exceed the City's noise standards. During its subsequent operation as a large warehouse, the Project will also subject neighboring residences to excessive noise levels.

Because construction and operational noise impacts will likely exceed applicable significant thresholds under the CEQA Guidelines, the Long Beach Municipal Code ("Code" or "LBMC"), and the City's General Plan, the use of a categorical exemption is inappropriate per 14 Cal. Code. Regs. § 15000 *et seq.* (the "CEQA Guidelines").

Hence, the City should require the Project applicant to prepare a more demanding CEQA review, such as an environmental impact report ("EIR") or mitigated negative declaration ("MND") to consider feasible mitigation measures.

Figure 1
Photo of dozens of homes and some businesses across Cherry Avenue from Project site.



I. EXECUTIVE SUMMARY

As explained herein in this report, I have made the following conclusions about the Cherry Avenue Warehouse Project. (Section references are to my narrative discussion *infra* in this letter):

Section II (pp. 5-6):[1] The City and Applicant agreed to Project-specific noise mitigation in Conditions of Approval (COA-20 and COA-58) that directly conflicts with CEQA's absolute bar against mitigation measures for categorical exemptions. Thus, by its own practice, the City appears to admit that there is a fair argument that the Project will cause potentially significant noise impacts. The close proximity and age of adjacent homes west of Cherry Avenue constitutes an unusual circumstance related to construction noise impacts, which supports the conclusion that a categorical exemption is inappropriate for the Project.

Even the City's proposed Conditions of Approval will not adequately reduce the warehouse's noise impacts to a less-than-significant level. Condition #20 regarding nighttime noise levels and trucking use is too vague and ineffective. Condition #58 which requires the property be maintained in a quiet condition and maintained so as not to be detrimental to adjacent properties and occupant is also too vague to be effective.

Section III (pp. 6-10) The Project will generate noise levels that exceed many of the applicable thresholds of significance, and will therefore create significant noise impacts to its neighbors. These noise standards are described in this section.

[1] Herein, page citations are either to the document's stated pagination (referenced by "p. ##") or to the pages' location within the referenced PDF document (referenced by "PDF-- ##"). Websites and documents cited herein were accessed in February, 2023 and copies of which will be made available to City officials if requested.

Section IV (pp. 11-13) The threshold of significance for construction noise should be 70 dBA L_{eq} in the daytime and 65 dBA L_{eq} at nighttime to avoid significant noise impacts, not the excessive daytime 80 dBA L_{eq} standard and 70 dBA L_{eq} nighttime standard employed by the Project's Noise Study.

Section V.1 (pp. 15-17) The proposed nighttime construction of the concrete slab pour activities would generate significant noise impact at neighboring homes. Those maximum nighttime construction noise levels at a nearest residence of 76.5 dBA L_{max} would exceed the City's maximum 65 dBA L_{max} nighttime threshold of significance (LBMC § 8.80.150(B)(5)).

Section V.2 (pp. 17-18) Average nighttime construction noise levels of 72 dBA L_{eq} at nearest residence 220 feet away would exceed the City's 45 dBA L_{50} threshold of significance. (LBMC § 8.80.150(B)(1)). Similarly, at more than a dozen homes up to 400 feet away from the concrete slab pour work, nighttime average construction noise levels in excess of of 67 dBA L_{eq} would also exceed the City's maximum 45 dBA L_{50} threshold of significance.

Section V.3 (pp. 18- 19) In interior rooms of nearby homes during the Project's concrete slab pour work, nighttime construction noise levels of 52 dBA L_{eq} would exceed the City's maximum 35 dBA L_{eq} nighttime interior noise level threshold of significance (LBMC § 8.80.170(A), Table C). Even at more distant homes up to 400 feet away if not blocked by intervening structures, their interior room noise levels could reach 47 dBA L_{eq} at nighttime and also exceed the 35 dBA L_{eq} threshold. Those same construction noise levels if that work is conducted in the daytime would exceed the City's daytime threshold of 45 dBA L_{eq} (LBMC § 8.80.170(A)). They would also exceed the General Plan's maximum acceptable indoor noise standards of 45 dBA L_{dn} (daytime) and 35 dBA L_{dn} (nighttime), (Noise Element, p. 137, Table 11).

Section V.4 (p. 19) The magnitude of the *increase* in noise levels at the nearest homes would be significant during nighttime concrete pour activities. The existing average noise level at the nearest homes is about 65.3 dBA L_{eq} at nighttime. That construction noise heard at those homes could add about 72.5 dBA L_{eq}, resulting in over a 7 dB *increase* during nighttime construction on the concrete pour activities. That increase is significant because it would exceed the 1.5 dBA threshold identified for conditions at these homes where ambient is greater than 65 dBA L_{eq} (FICON; also Noise Study, p. 21, Table 4-1).

Section V.5 (pp. 20-21) Concrete pour activities could generate a 24-hour day-night average noise level of 78.5 dBA L_{dn} at the nearest home, and 73.3 dBA L_{dn} or more at more distant dozens of homes within 400 feet of the concrete pour location. Those noise levels would exceed the threshold of significance for 24-hour day-night average noise levels is 70 dBA L_{dn}. (OPR, General Plan Guidelines, 2003) A noise level louder than that is considered to be "normally unacceptable" for the nearby residences. This Project could generate noise levels of 78.5 dBA L_{dn} at the nearest home, and 73.3 dBA L_{dn} or more at more distant dozens of homes within 400 feet of the concrete pour location. Exceedance of this standard would be a significant noise impact. Even if no concrete pour work or other construction was done at nighttime, meaning that construction work would only occur in the daytime hours, the 24-hour day-night average noise level could be over 70 dBA L_{dn} at the nearest house 220 feet from the concrete pour location and would thus be a significant noise impact.

Section VI (pp. 22-23): Backup alarms mandated on heavy equipment and trucks could create noise levels at the nearest home of about 83 dBA L_{max} (when adjusted with a 5 dB penalty for a pure tone per LBMC § 8.18.160). The City's maximum daytime noise standard is 70 dBA L_{max}. Backup alarms could exceed this threshold by 13 dB, resulting in a significant noise impact.

Section VII (pp. 24- 25): Project trucking would expose the adjacent Los Angeles County's Department of Animal Care and Control building to noise levels from passing heavy trucks in its driveway about 160 feet from this building to maximum noise levels of about 85 dBA L_{max}. The City's threshold of significance for *maximum* noise level exposure for such a commercial building is 75 dBA L_{max}. The 10 dBA exceedance of this threshold indicates a significant noise impact at that commercial property.

Section VIII (pp. 26-28): The 50-foot tall massive western wall of the warehouse will increase traffic noise levels by about 2 dBA at homes west of Cherry Avenue by reflecting existing and – Project-added traffic noise toward those homes. Because these homes are already exposed to traffic noise levels in excess of the City's 65 dBA standard for residential uses, any Project-related increase in noise levels greater than 1.5 dB is considered a significant noise impact (FICON; Noise Study pp. 19-20; CalTrans, FHA).

Section IX (pp. 28-29): The City's maximum exterior noise standard for homes west of Cherry Avenue at nighttime is 65 dBA L_{max} (LBMC § 8.80.150(B)(5)). The possible use of mechanical sweeper/vacuums in the parking lot and driveways west of the warehouse could generate noise levels at the nearest homes up to 200 feet away from such pavement cleaning of 67.5 dBA L_{max}, thus exceeding the nighttime threshold of significance and creating a significant noise impact at some homes.

Section X (p. 30): The Project's Noise Study is incomplete, inaccurate, entirely conclusory, is based on insufficient measurement locations, and likely contains artificially-inflated ambient noise levels due to errors in the noise level measurements that were taken and their inconsistent exceedance of noise level data in the General Plan Noise Element. The noise discussion utterly fails to meet the evaluation standards set by the City's Noise Ordinance or other public agencies, nor is consistent with other noise studies conducted within the City.

Section XI (pp. 31-36): The Project applicant fails to demonstrate that all technically feasible noise attenuation measures are incorporated into the Project, and relies on the City's Noise Ordinance as a substitute to the significance thresholds provided under the City's and other applicable noise standards. The Project's paltry noise analysis failed to provide any meaningful information to allow the City to adequately consider standard mitigation measures provided under applicable CEQA guidance documents, many of which have been incorporated into numerous City projects via enforceable Conditions of Approval. This constitutes a sharp deviation of the City's practice for similarly-situated projects and must be corrected in a CEQA-compliant MND or EIR—just like other projects of this nature.

II. CEQA Does Not Allow Project-Specific Mitigation Measures When Considering the Adequacy of a Categorical Exemption

As an initial observation, it must be noted that the Cherry Avenue Warehouse Project is proposing two Project-specific Conditions of Approval ("COAs") to directly or indirectly mitigate noise impacts. That is an admission that there is a fair argument that the Project may cause significant noise impacts and, therefore, a categorical exemption is inappropriate for this Project.

The proposed COA-20 and COA-58 relate to noise impacts and compliance with the City's Noise Ordinance. While the City should be applauded for trying to ameliorate the Project's noise impacts, these COAs have not been vetted by the public nor tethered to an adequate noise analysis as required by CEQA. Furthermore, CEQA does not allow an agency to use project-specific mitigation measures, like these two noise-related COAs restricting noise levels from outdoor common areas, to reduce a project impacts as a means to qualify for a categorical exemption and avoid a more demanding CEQA review.[2] Even if the Project utilized an MND, which it did not, CEQA requires a lead agency to recirculate the MND if additional mitigation measures are subsequently added after the MND's initial circulation in order to publicly-vet the adequacy of the new mitigation measures.[3]

As discussed herein, substantial evidence shows operational impacts will be significant and, therefore, mitigation measures should be considered pursuant to a CEQA-compliant MND or EIR being prepared; which is consistent with the Long Beach General Plan's Noise Element ("Noise Element") that clearly states that "… the City has adopted a policy of requiring Environmental Impact Studies to be conducted for all City projects … include[ing] private projects for which a building permit or other entitlement for use is required." [4]

As recognized by one court, lead agencies are not required to evaluate mitigation measures during its preliminary review of projects and therefore not appropriate in the context of categorical exemptions; instead consideration of mitigation measures is reserved (as relevant here) for MNDs subject to CEQA's fair argument standard whereby "[i]f there is a disagreement between experts over the significance of an effect . . . the lead agency shall treat the effect as significant " *Azusa Land Reclamation Co. v. Main San Gabriel Basin Watermaster* (1997) 52 Cal.App.4th 1165, 1200-1201 (citing CEQA Guidelines § 15064(h)(2)).

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[2] See e.g., *Salmon Protection & Watershed Network v. County of Marin* (2004) 125 Cal.App.4th 1098, 1102, 1108 (stating while "mitigation measures may support a negative declaration but not a categorical exemption … Reliance upon mitigation measures (whether included in the application or later adopted) involves an evaluative process of assessing those mitigation measures and weighing them against potential environmental impacts, and that process must be conducted under established CEQA standards and procedures for EIR's or negative declarations."); *Azusa Land Reclamation Co. v. Main San Gabriel Basin Watermaster* (1997) 52 Cal.App.4th 1165, 1200 ("In determining whether the significant effect exception to a categorical exemption exists, '[i]t is the possibility of a significant effect . . . which is at issue, not a determination of the actual effect, which would be the subject of a negative declaration or an EIR. Appellants cannot escape the law by taking a minor step in mitigation and then find themselves exempt from the exception to the exemption.' [Citation].")

[3] *See Gentry v. Murrieta* (1995) 36 Cal.App.4th 1359, 1380 ("if there was substantial evidence to support a fair argument that the Project would have a significant effect… then the City could not adopt new mitigation conditions aimed at this effect without recirculating its proposed negative declaration. Nevertheless, the City added mitigation condition… without recirculating. In so doing, it abused its discretion.").

[4] Noise Element, p. 130, http://www.lbds.info/civica/filebank/blobdload.asp?BlobID=3051

III. Operational and Construction Noise Impacts Will Be Significant With These Applicable Noise Standards:

Applicable Operational Noise Standards

To demonstrate the various ways the Cherry Avenue Warehouse's operational noise impacts will be significant, one must consider the various thresholds applicable to this Project.

CEQA Guidelines Appendix G

First, under Appendix G to the State CEQA Guidelines,[5] a project's noise impact is normally significant if:

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- A substantial permanent increase in ambient[6] noise levels in the project vicinity above levels existing without the project; orA substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

Long Beach General Plan Noise Element

Second, under the City's General Plan Noise Element, Recommendation 4 and 4.4 provides (emphasis added) that "[n]o future development shall be allowed which is *incompatible* with the existing or future noise environment [,]" where any development is considered "*incompatible* with its noise environment if *any of the standards or criteria listed* in [the Noise Element] are exceeded."[7] Among the standards/criteria listed in the Noise Element "to protect public health and well-being," include the maximum limits summarized in **Table 1** on the following page, which the Noise Element states (emphasis original) "*MUST* be utilized along with other relevant data."[8]

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[5] California Natural Resources, Appendix G-Environmental Checklist Form, http://resources.ca.gov/ceqa/guidelines/Appendix_G.html.

[6] Ambient Noise is defined in the City's General Plan. *See* Noise Element, *supra* fn. 3, p. 195 ("the all-encompassing noise associated with a given environment, being usually a composite of sounds from many sources near and far. For the purposes of this [proposed model noise] ordinance, ambient noise level is the level obtained when the noise level is averaged over a period of at least 15 minutes without inclusion of noise from occasional or occasional and transient sources, at the location and time of day near that at which a comparison is to be made."); *see also* p. 223 (providing similar definition).

[7] Noise Element, *supra* fn. 3, p. 145.

[8] *Ibid*., p. 136-139.

Table 1: Long Beach General Plan Noise Element Recommended Criteria for Maximum Acceptable Noise Levels in A-Weighted Decibels (dBA)

Land Use Type [a]	Outdoor			Indoor
	Maximum Single Hourly Peak	L_{10} [b]	L_{50} [c]	L_{dn} [d]
Residential 7 am - 10 pm (Daytime)	70	55	45	45
Residential 10 pm -7 am (Nighttime)	60	45	35	35
Notes: a. Homes and apartments fall under the residential category of the Noise Element. b. Noise Levels exceeded ten percent of the time. c. Noise levels exceeded fifty percent of the time. d. Day-night average sound level. The 24-hour A-weighted equivalent sound level with a 10-decibel penalty applied to nighttime levels.				
Source: General Plan Noise Element, pp. 136-139, Table 11				

Therefore, under the Noise Element, the Project's noise impact is significant if at residential land uses:

- Outdoor noise levels exceed 70 dBA L_{max} (daytime) or 60 dBA L_{max} (nighttime).
- Outdoor noise levels exceed 45 dBA L_{50} (daytime) or 35 dBA L_{50} (nighttime).
- Indoors noise levels exceed 45 dBA L_{dn} (daytime) or 35 dBA L_{dn} (nighttime).
- Average maximum noise levels outside the nearest building at the window of the occupied room closest to the Project site boundary exceeds 70 dBA in areas away from main roads and sources of industrial noise, or exceeds 75 dBA in areas near main roads and heavy industries (General Plan Noise Element, p. 95).

Long Beach Municipal Code

Third, under Chapter 8.80 of the LBMC (governing environmental noise), the Project site is located within Receiving Land Use District Two, but also adjacent to residential land uses in District One, and subject to the exterior and interior noise limits as summarized in Table 2 below:

Table 2: Long Beach Noise Standards for Residential – District One, and Commercial Land Uses - District Two (Before 5 dB reduction for speech/music per LBMC § 8.80)

Land Use District	Exterior		Interior	
	Exterior Noise Level (Leq) 7 am to 10 pm	Exterior Noise Level (Leq) 10 pm to 7 am	Interior Noise Level (Leq) 7 am to 10 pm	Interior Noise Level (Leq) 10 pm to 7 am
District One	50	45	45	35
District Two	60	55	45	35
Note: No person shall operate or cause to be operated any source of sound at any location within the incorporated limits of the City or allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, which causes the noise level when measures from any other property to exceed: 1. The noise standard for that land use district as specified in the above Table for a cumulative period of more than thirty (30) minutes in any hour; or 2. The noise standard plus five (5) decibels for a cumulative period of more than fifteen (15) minutes in any hour; or 3. The noise standard plus ten (10) decibels for a cumulative period of more than five (5) minutes in any hour; or 4. The noise standard plus fifteen (15) decibels for a cumulative period of more than one (1) minute in any hour; or 5. The noise standard plus twenty (20) decibels or the maximum measured ambient, for any period of time.			
Source: City of Long Beach Municipal Code, Section 8.80.160 and Section 8.80.170. 1977.				

5 dBA Reduction for Impulsive Noise, Repetitive Speech or Music: However, to protect against the increased human disturbance potential of some sound characteristics, the Code requires a reduction in the City's exterior and interior noise limits of 5 dB for repeated impulsive noise, music, or speech.[9] As proposed, the Project could include speech and possibly music from car stereos in outdoor parking lot areas located to the west of the warehouse building that could continue for more than 5 minutes in any hour, and directly affect the homes west of Cherry Avenue from the Project Site.

Therefore, under the Code and consistent with City's past practice,[10] the Project's noise impact is significant if the homes west of Cherry Avenue experience noise levels that exceed:

- General exterior noise limit of 60 dBA L_{eq} (daytime) or 55 dBA L_{eq} (nighttime), or
- Exterior noise limit for impulsive noise, music and speech of 55 dBA L_{eq} (daytime) or 50 dBA L_{eq} (nighttime).

Applicable Construction Noise Standards

Fourth, the applicable construction noise standards are derived from the City's and other agencies' thresholds of significance for construction noise, as well as the standards proposed by the City and the applicant discussed in the Project's Noise Study, which include:

- General exterior noise limit of 70 dBA L_{eq} (daytime) or 65 dBA L_{eq} (nighttime), or
- Maximum construction noise level of 65 dBA L_{max} at homes (Noise Study, p. 43), or
- Average nighttime construction noise level of 45 dBA L_{50} at neighboring homes (Noise Study, p. 45, Table 8-4: threshold of 45 dBA L_{eq}), or
- Interior noise limit of 35 dBA L_{eq} at nighttime (LBMC § 8.18.170(A)), or
- 24-hour day-night weighted average of 70 dBA L_{dn}. (Calif. General Plan Guidelines)

Past Practice by the City of Long Beach

Fifth, based on past environmental reviews where the City served as the lead agency,[11] the Project's noise impact would be significant if:

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[9] *See* LBMC § 8.80.160 (for exterior noise limits: "In the event that alleged offensive noise contains a steady audible tone such as a whine, screech, or hum, or is a *repetitive noise* such as hammering or riveting or *contains music or speech conveying informational content*, the standard limits … *shall be reduced by five (5) decibels*.") (emphasis added); *see also* LBMC § 8.80.180 (containing same language for interior noise limits).

[10] *See* 100 E. Ocean Blvd. Project (Oct. 2018) MND, p. 121 [fn. 68], https://web.archive.org/web/20190202022910/http:/www.lbds.info/civica/filebank/blobdload.asp?BlobID=7268;

[11] *See e.g.*, 207 Seaside Way Project (Mar. 2015) MND, p. 85, http://www.lbds.info/civica/filebank/blobdload.asp?BlobID=4949; 442 W. Ocean Blvd. Project (Mar. 2015) MND, p. 83, http://www.lbds.info/civica/filebank/blobdload.asp?BlobID=4956; Oceanaire Apartment Project (Mar. 2015) MND, p. 85, http://www.lbds.info/civica/filebank/blobdload.asp?BlobID=4978; 100 E. Ocean Blvd. Project (Oct. 2018) MND, p. 122, https://web.archive.org/web/20190202022910/http:/www.lbds.info/civica/filebank/blobdload.asp?BlobID=7268; Second + PCH Development Project (Mar. 2011) EIR, pp. IV.I:17-18,

- Operational noise increase existing ambient noise levels at adjacent sensitive receptors by 5 dBA or more; but where existing ambient noise levels at some affected sensitive receptors exceed 65 dBA L_{eq}, an increase of 1.5 dBA or more would be significant.
- Cumulative operational noise levels would increase 3 dB or more over existing conditions and the resulting noise level exceeds applicable exterior standard at a sensitive use;
- If noise levels would cause a sensitive land uses, like a residences, to exceed the desirable exterior noise exposure of 65 dBA Community Noise Equivalent Level (CNEL); or
- The project causes the ambient noise level measured at the property line of affected uses to increase by 3 dBA in CNEL to or within the "normally unacceptable" or "clearly unacceptable" category identified in Table 7 below.

Project's Exterior Parking Lot and Loading Dock Area Activity

This Cherry Avenue Warehouse Project will include various operational noise sources typical for the use and maintenance of a warehouse building (e.g., fixed mechanical and HVAC equipment, parking facilities, parking lot mechanical pavement cleaning, loading docks, backup alarms, parking and off-site roadway traffic, etc.). No restrictions prohibit these activities beyond compliance with the City's noise standards (i.e., COA-20).

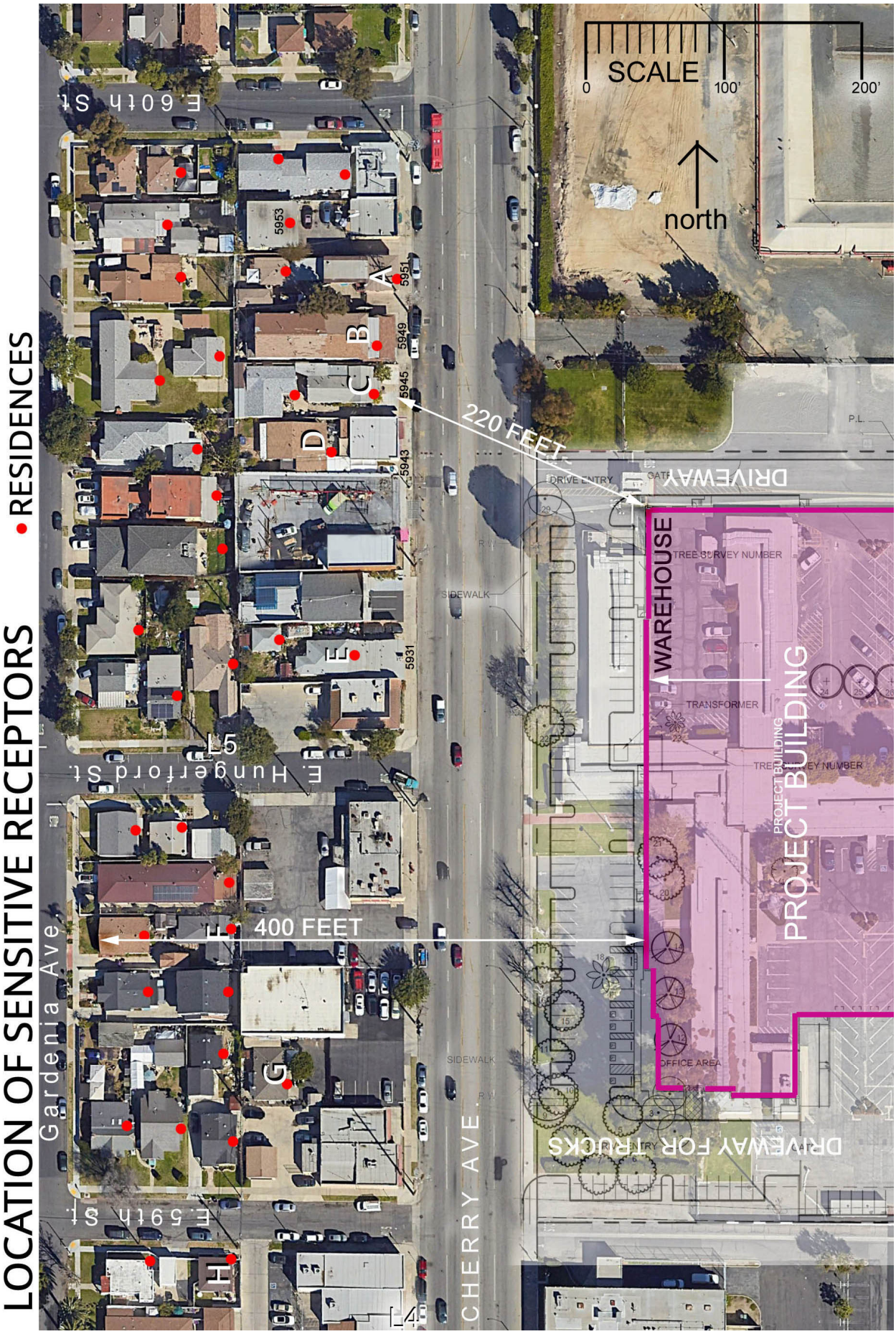
However, as discussed herein, noise from these outdoor activities will significantly impact neighboring residences west of Cherry Avenue (as depicted on **Figure 2**).

Unlike other projects reviewed by the City, the *Project applicant has not submitted sufficient noise measurements of existing ambient noise levels or evidence that compliance with the City's noise standard (COA-20) is even possible*. Such measurements and analysis are critical if the City is to protect nearby residential neighbors from adverse sleep-disturbing impacts from new warehouse noise sources. Absent meaningful and credible noise measurements, the LBMC's general and music/speech-specific ambient noise levels must be presumed.

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http://www.lbds.info/civica/filebank/blobdload.asp?BlobID=3375; Staybridge Suites Hotel (Nov. 2016) MND, p. 53, http://www.lbds.info/civica/filebank/blobdload.asp?BlobID=6245; Shoreline Gateway East Tower Project (Aug. 2016) Final EIR Addendum-Noise Study, pp. 12-13, http://www.lbds.info/civica/filebank/blobdload.asp?BlobID=6152.

Figure 2: Neighborhood Plan (Showing Proximity to Neighboring Residences)



IV. Threshold of Significance for Construction Noise Should be 70 dBA L_{eq} in the Daytime to Avoid Significant Noise Impacts

The Project's Noise Study chooses a threshold of significance for construction noise that is not sufficiently protective of the nearby residential neighbors. The Noise Study sets an excessively high threshold of significance for daytime construction noise of **80 dBA L_{eq}** and nighttime construction noise of 70 dBA L_{eq}. That daytime noise level is also inconsistent with the standards in the Long Beach General Plan Noise Element on page 95 which sets a lower 70 or 75 dBA L_{eq} daytime noise standard, while discussing construction noise:

> ". . . average **maximum** noise levels outside the nearest building at the window of the occupied room closest to the site boundary, should not exceed: **70 dBA in areas away from main roads** and sources of industrial noise; 75 dBA in areas near main roads and heavy industries." (Emphasis added)

Using an 80 dBA L_{eq} threshold that is inconsistent with the Long Beach General Plan noise standards would violate CEQA which requires such inconsistencies to be disclosed, and they have not been. Even these General Plan's noise standards may be insufficient for evaluating this Project's construction noise impacts if construction were to occur at night as the Noise Study predicts. See: *King & Gardiner Farms* (2020) 45 Cal.App.5th 814, 881-882 (holding that "conformity with a general plan does not insulate a project from EIR review where it can be fairly argued that the project will generate significant environmental effects.")

But ignoring those General Plan noise standards, the preparer of the Noise Study, on p. 39, erroneously claims that the City of Long Beach General Plan does not establish numeric maximum acceptable construction source noise levels at potentially affected receivers for CEQA analysis purposes. But the Noise Element on page 95 actually does, as discussed above. So more favorable to the client's concern for less regulation than to the public's need for peace and quiet, the Noise Study instead uses a daytime exterior construction noise level of 80 dBA L_{eq} at residential properties that it borrows from the Federal Assessment Manual. There is substantial evidence that an 80 dBA L_{eq} threshold is insufficiently protective for this Project and CEQA requires evaluation and application of stricter standards when applicable.[12] The City's Noise Element standards are certainly applicable. Quieter construction noise standards used in other California communities also are evidence of the need to protect residents from loud noise levels being permitted up to 80 dBA L_{eq}.

The preparers of this Project's Noise Study, Urban Crossroads, have used **70 dBA L_{eq}** as a daytime construction noise threshold of significance for the development of other large warehouse projects. One such noise study they prepared was for a 316,082 square foot warehouse in Riverside County

[12] See *Berkeley Keep Jets Over the Bay Committee v. Board of Port Cmrs.* (2001) 91 Cal.App.4th 1334, 1380, [CEQA did not define "significant noise impacts simply in terms of whether a project would violate applicable local, state, or federal noise standards"]); see *Sierra Watch v. County of Placer* (2021) 69 Cal.App.5th 86, 107 ("a threshold of significance cannot be applied in a way that would foreclose the consideration of other substantial evidence tending to show the environmental effect to which the threshold relates might be significant."). See: *Save Our Capitol! v. Dept. of General Services* (January 18, 2023, C096617) ___ Cal.App.5th ___, at p. 43 (similarly holding "[a] regulatory standard [cannot] be applied so as to foreclose consideration of substantial evidence showing a significant environmental impact from a project.")

where they used **70 dBA L_{eq}** as a daytime construction noise threshold.[13] Another noise study they prepared was for a 296,297 square foot warehouse building and a smaller 88,746 square foot warehouse building in the City of Fontana using a construction threshold of significance of 70 CNEL in the daytime and 65 CNEL at nighttime.[14]

To evaluate how significantly a project may disturb its neighbors, one step is to consider how intrusive its noise will be compared to the ambient or *background* noise levels without the project. A noise source that is starkly audible above the background noise level is more annoying and harmful to residential neighbors. The L_{90} measurement near Cherry Avenue (lowest average minimum level) is considered to represent the background noise without the prominent traffic noise sources that are not uniformly loud. Homes measured at location "L5" are already exposed to background noise levels in the daytime that, for half the time, are less than 60 dBA L_{90}.[15]

FIGURE 3 - Graphing L_{90} "background" noise levels near homes on Cherry Avenue

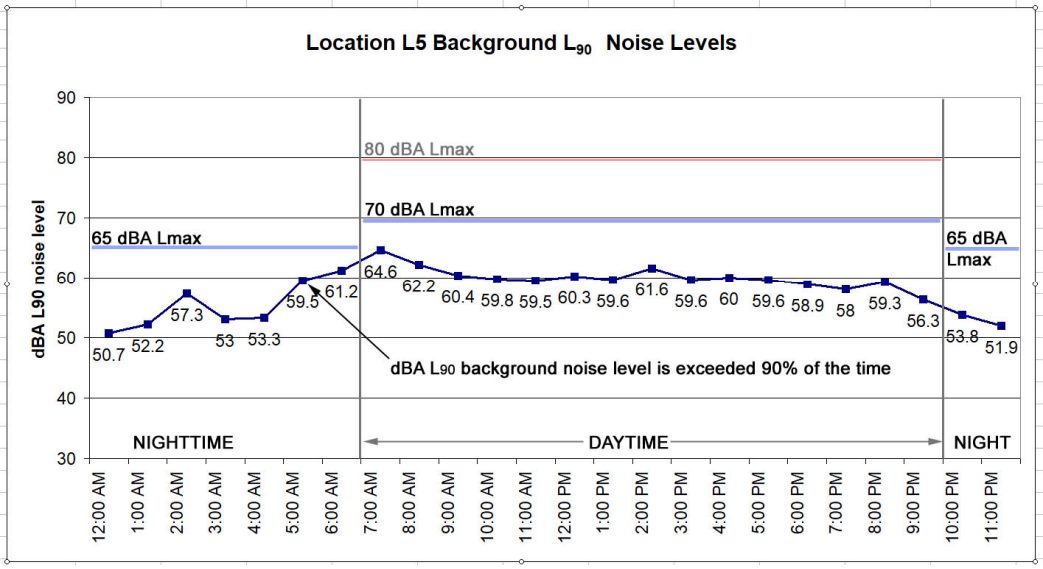


Figure 3 above is a graph of the background noise levels near homes west of Cherry Avenue at noise measurement location "L5."[16] This graph is useful in considering how much additional noise the Project might create that would be clearly audible at times above the background noise

[13] See the noise study for a 316,082 square foot warehouse by Urban Crossroads for the Harvill and Rider Project's Mitigated Negative Declaration dated April 28, 2021 and approved by Riverside County, on pages 5-82 to 5-83, which states regarding construction noise: "However, to ensure a more conservative analysis herein, a threshold of 70 dBA L_{eq} is utilized, which is consistent with the 70 dBA CNEL standard for noise-sensitive uses contained in the County's General Plan." This MND will be made available to the City if requested and it is available online at https://planning.rctlma.org/Portals/14/Harvill%20and%20Rider%20MND.pdf

[14] See Urban Crossroads' Noise Study for the North Fontana Industrial Complex (Acacia) for a 296,297 square foot warehouse building and another smaller warehouse building in the City of Fontana, April 13, 2022, at page 19, Table 4-1, Significance Criteria Summary: 70 CNEL in the daytime and 65 CNEL at nighttime. (A 70 CNEL limit is similar to a 70 dBA L_{eq} standard.) This noise study will be made available to the City if requested and it is available online at https://www.fontana.org/DocumentCenter/View/40374/SBC-Appendix-J2_Acacia-Noise-Study

[15] See Noise Study, PDF-1039, Wednesday, April 13, 2022 at noise level measurement location L5 - Located west of the Project site near single-family residence at 1919 East Hungerford Street. Also see **Figure 3** for a graph of these measured noise levels.

[16] *ibid.*

level without exceeding a threshold of significance if the Noise Study's choice of 80 dBA L_{eq} is used. If 80 dBA L_{max} is used as a threshold of significance, neighbors could be exposed to much louder daytime construction noise levels at times as much as 24 dBA greater than background levels with no relief.

The consideration of background noise levels is important when selecting a threshold of significance. The 90th percentile-exceeded noise level, L_{90}, is a metric that indicates the single noise level that is exceeded during 90% of a measurement period, although the actual instantaneous noise levels fluctuate continuously. The L_{90} noise level helps quantify the acoustical character of an environment, such as "rural area," "urban area," or "noisy neighborhood" because it represents the residual (i.e., ambient) noise between individual noise events, such as a truck pass-by or aircraft over flight.

The L_{90} noise level is often near the low end of the instantaneous noise levels during a measurement period. Brief, intermittent and loud sources, such as an aircraft flyover, car doors closing, bird chirps, dog barks, car horns, truck pass-by, etc., will influence the L_{eq} of the measurement period but typically not the L_{90}, even though these other noise sources may be briefly audible and louder than the a noise source of interest during the same measurement period. If a person was only listening to one continuously operating noise source, such as a large fan, the L_{eq} and L_{90} noise levels at that location would be approximately equal.

So in conclusion, substantial evidence demonstrates that the Noise Study's 80 dBA L_{eq} threshold for construction noise does not adequately protect the neighborhood, especially when the City's General Plan sets a 70 dBA L_{eq} threshold "in areas away from main roads" where homes farther away from Cherry Avenue are located. The 70 dBA L_{eq} threshold used by Urban Crossroads in its other noise studies should inform the City of Long Beach that 70 dBA L_{eq} is the proper standard for CEQA review of this Project.

Figure 4 – Location of Nearest Homes to the Warehouse and its Western Parking Lot

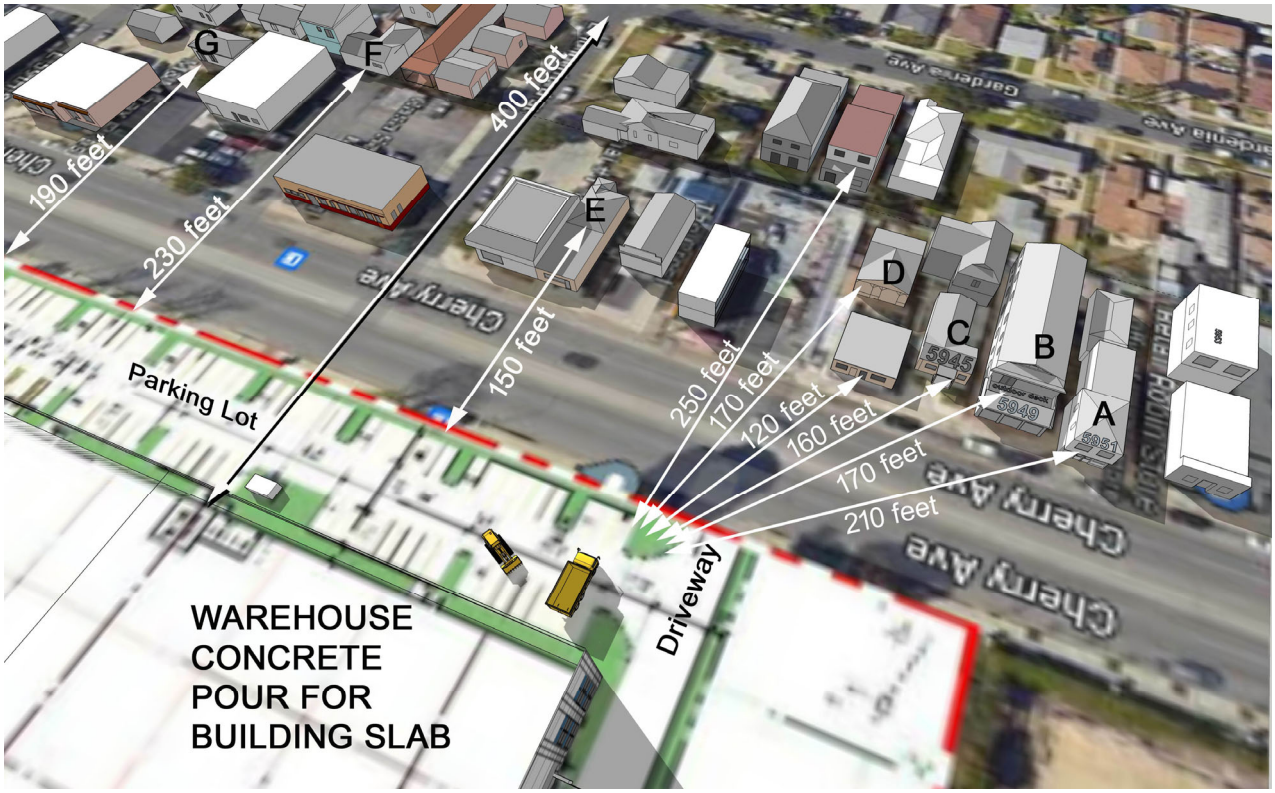


Table 4 – Distances from Nearby Homes to Warehouse and to Western Parking Lot

Home	Address	Distance to Warehouse	Distance to Parking Lot
A	5951 Cherry Avenue	240’	210’
B	5949 Cherry Avenue	220’	170’
C	5945 Cherry Avenue	220’	160’
D	5943 Cherry Avenue	230’	170’
E	5931 Cherry Avenue	220’	150’
F	5918 Gardenia Ave.	300’	230’
G	5905 Cherry Avenue	260’	190’

V. NIGHTTIME CONSTRUCTION DURING CONCRETE SLAB POUR FOR WAREHOUSE BUILDING WOULD CREATE SIGNIFICANT NOISE IMPACTS

The Project's Noise Study[17] states that construction and pouring of the building's concrete slab will occur at nighttime.[18] But the Noise Study (pages 43 to 45) seriously underestimates how loud that nighttime construction noise will be at the nearest residences. The construction noise levels of such concrete pour activities would exceed the City's noise standards at dozens of nearby homes. See **Figures 2 and 4** above for the locations of these noise-affected nearest homes.

V.1 The Maximum Noise Level of Proposed Construction Would Create a Significant Noise Impact

For example, the City's threshold of significance for nighttime construction noise from pouring this concrete is a *maximum* of 65 dBA L_{max} at neighboring homes.[19] This is a noise level that, even if brief and lasting less than 1 minute, would constitute a significant noise impact. But that noise level would be significant at times at the nearest residence when it would be greater than 76.5 dBA L_{max}.

TABLE 3-1: OPERATIONAL NOISE STANDARDS

Jurisdiction	Land Use	Time Period	Exterior Noise Level Standard (dBA)[1]				
			L_{50} (30 mins)	L_{25} (15 mins)	L_8 (5 mins)	L_2 (1 min)	L_{max} (<1 min)
City of Long Beach[2]	District 1	7:00 a.m. to 10:00 p.m.	50	55	60	65	70
		10:00 p.m. to 7:00 a.m.	45	50	55	60	65

[1] The percent noise level is the level exceeded "n" percent of the time. L_{25} is the noise level exceeded 25% of the time.
[2] Chapter 8.80 of the City of Long Beach Municipal Code (Appendix 3.1).

The Noise Study presents these noise standards in its Table 3-1. It uses this Table 3-1 to identify a different noise standard for construction noise during the concrete pouring activities of 45 dBA L_{50} for an *average* noise level, where the construction noise level at nearby homes would exceed 45 dBA for more than 30 minutes in an hour. But the Noise Study identifies no other noise threshold of significance for *maximum* noise levels. It is the very loudest construction noise maximum level that is most disturbing to nearby residents. Those maximum volume sounds are clearly heard above the background or ambient conditions, and are the most disturbing when so loud. Accordingly, use of a threshold of significance of 65 dBA L_{max} for a maximum construction noise level is equally valid.

That noise level of 65 dBA L_{max} would be exceeded though by even one type of heavy equipment being used for the concrete pour. A single concrete mixer truck operated near the proposed

[17] The Project's Noise Study, by Urban Crossroads, is found at the **Attachment E** (Notice of Exemption Associated Technical Reports), PDF-pages 945 to 1058, titled: "Cherry Avenue Warehouse Noise Impact Analysis," dated May 6, 2022.
[18] See Noise Study, p. 43. (Attachment E, PDF-993)
[19] See Noise Study, p. 15, Table 3-1, 10pm- 7am: 65 dBA L_{max} noise standard. (Attachment E, PDF-965)

building slab will generate noise level as loud as **89 dBA L_{max}** at 50 feet.[20] Alternatively, concrete is not always delivered to the site in a concrete mixer truck from a distant concrete batch plant. Sometimes a portable concrete batch plant is located onsite when pouring large areas of concrete slabs. Such a portable concrete batch plant, if located onsite temporarily near the proposed warehouse's location, could generate a louder noise level of about **96 dBA L_{max}** at a distance of 50 feet.[21]

Figure 5 – Proximity between Construction Equipment or Parking and Nearby Homes



At a distance of 400 feet from the warehouse location where dozens of homes exist west of Cherry Avenue, the maximum noise level of just one concrete mixer truck's operation would be as great as about **71 dBA L_{max}** and would exceed the nighttime maximum noise standards of 65 dBA L_{max}.[22] Even more disturbing, at the nearest home[23] at only about 220 feet from the warehouse building's concrete floor slab, that maximum noise level would be about **76 dBA L_{max}** and would

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[20] See: County of Ventura, Construction Noise Threshold Criteria and Control Plan (2010), "Typical Construction Equipment Noise" (Type: Concrete mixer truck: **89 dBA L_{max}** maximum noise level at 50 feet), available online at: https://docs.vcrma.org/images/pdf/planning/ceqa/Construction_Noise_Thresholds.pdf This table of typical construction equipment noise levels is presented in **Appendix A** attached to this report.

[21] *Ibid.*

[22] Calculation: Noise level attenuation due to distance is calculated as reduced by about 6 dB for each doubling of distance from a point source. One can calculate a dB level at different distances when there is a known dB level for a known distance by the following equation: $dB_2 = dB_1 - 10 \times A \times LOG(d_2/d_1)$ where:

LOG = logarithm, base 10,
A = dB drop-off rate coefficient (in this Project's case, a = 2.0 for a 6 dB drop off rate (point source, no atmospheric absorption)).
dB_1 = dB level at know distance from source, d_1
dB_2 = dB level at another distance from source, d_2
d_1 = known distance from source for known decibel level dB_1
d_2 = second distance from source for which known decibel level estimate (dB_2) is desired

In this case, at a location 400' (d_2) from the property line, where dB_1 = 89 dBA at 50' (d_1),

$dB_2 = dB_1 - 10 \times A \times LOG(d_2/d_1) = 89 - 10 \times 2.0 \times LOG(400'/50') = 89 - 20 \times (-0.90) =$ *71 dBA L_{max}*.

[23] Home "C" at 5945 Cherry Avenue is about 220 feet from the proposed warehouse building, measured using the Project site plan and Google Maps. Heavy equipment might operate even closer to that home when pouring the concrete floor slab for the warehouse building.

exceed the 65 dBA L_{max} nighttime standard and even the daytime noise standard of 70 dBA L_{max}.[24] Therefore such maximum noise levels from construction noise during the concrete pours would create significant noise impacts for dozens of nearby homes. (See **Figures 2, 4** and **5** above for location of these nearby homes.)

With multiple equipment[25] operated simultaneously during other Project construction work, the noise impact to neighboring residents would be even greater. For example during demolition and site work at a distance of 50 feet, dozers have been measured at 90 dBA L_{max} and excavators at 92 dBA L_{max}. (See **Appendix A** [*Typical Construction Equipment Noise*].)

EQUIPMENT	MAX. NOISE	USAGE RATE	AVERAGE NOISE
Dozer	90 dBA L_{max}	used 40% of an hour	86.0 dBA L_{eq}
Excavator	92 dBA L_{max}	used 40% of an hour	88.0 dBA L_{eq}
Jackhammer	88.9 dBA L_{max}	used 20% of an hour	81.9 dBA L_{eq}
(*noise levels logarithmically added for total*):		TOTAL:	**90.7 dBA L_{eq}** at 50 feet.

Accordingly, the Noise Study fails to disclose how loud the Project's maximum noise levels would be when measured at neighboring homes, which would be loud enough to create significant noise impacts during the nighttime and the daytime.

V.2 The Average Noise Level of Proposed Construction Would Also Create a Significant Noise Impact

The Noise Study states the City's threshold of significance for nighttime construction noise from pouring this concrete is an *average* of 45 dBA L_{50} when measured at the exterior of neighboring homes.[26] That is a noise level that is exceeded for more than 50% of the time.

But the *average* noise levels generated by a concrete mixer truck operating at nighttime at the edge of the warehouse slab could be greater than 72 dBA L_{eq} at the nearest homes which about 220 feet away or less, depending upon where equipment is staged and operated. (See **Figure 4** illustrating the possible operation of some heavy equipment in the western parking lot closer to these homes.) That exceedance of the City's standards by as much as 27 dBA represents a significant noise impact to the closest residential neighbors.

A single concrete mixer truck operated near the proposed warehouse building slab will generate an *average* noise level of about 85 dBA L_{eq} at 50 feet.[27] With two nearby homes each located about

[24] Calculation as per footnote above: at 5945 Cherry Avenue, the noise level from the operation of a concrete mixer truck at a location 220' (d_2) from the warehouse building, where dB_1 = 89 dBA L_{max} at 50' (d_1),
$dB_2 = dB_1 - 10 \times A \times LOG(d_2/d_1) = 89 - 10 \times 2.0 \times LOG(220'/50') = 89 - 20 \times (-0.64) =$ *76 dBA L_{max}*.

[25] The Noise Study identifies multiple equipment use in pouring concrete for the building floor slab and foundation: "The reference noise levels describe the expected concrete pour noise sources that may include **concrete mixer truck movements and pouring activities**, concrete paving equipment, rear mounted concrete mixer truck backup alarms, engine idling, air brakes, generators, and workers communicating/whistling."

[26] See Noise Study, p. 45. (Attachment E, PDF-995) Table 8-4 "Nighttime Concrete Pour Noise Level Compliance", Nighttime Threshold of 45 dBA L_{eq}.

[27] See: County of Ventura, Construction Noise Threshold Criteria and Control Plan (2010), page 4: "Typical Construction Equipment Noise" (Type: Concrete mixer truck: **85 dBA L_{eq}** (average) noise level at 50 feet), available

220 feet from the warehouse's concrete floor slab, that concrete mixer truck noise would attenuate by distance to about **72 dBA L_{eq}** which significantly exceeds the permissible threshold of significance at nighttime of 45 dBA L_{50}. [28]

That noise impact would be greater at these homes if more than one piece of heavy equipment is operated simultaneously on the site, or if the equipment is operated at what would become the parking lot immediately west of the warehouse's floor slab.

For the several dozen homes located within 400 feet of the warehouse's concrete slab pour work, their residents also could be exposed to excessive noise levels of approximately 67 dBA L_{eq} or more on average during the nighttime. They too could experience significant noise impacts since that concrete pour noise level would exceed the 45 dBA L_{eq} nighttime threshold at their homes.

V.3 Interior Noise Levels Inside Homes Would Be Excessive Creating Significant Noise Impacts

The Noise Study fails to evaluate how loud the interior rooms of nearby homes would be during this Project's construction. The interior noise levels within some of these homes could be excessively loud at night due to Project's nighttime concrete pour activities. The City's Noise Ordinance, § 8.18.170(A), establishes a 35 dBA nighttime noise limit inside residences as their maximum allowable interior noise level. But that noise level is likely to be exceeded if a home is exposed to exterior noise levels at nighttime greater than 55 dBA L_{eq} from this Project's concrete pour activities. That exceedance would likely occur because interior rooms with closed, double-glazed windows can reduce exterior noise levels only by about 20 dBA. (See Table 3 below). (Calculation: If exterior noise level is greater than 55 dBA – 20 dBA = then the interior noise level will be greater than 35 dBA). Many neighboring homes will be exposed to more than 55 dBA of nighttime concrete pour activity noise, creating a significant noise impact.

Table 3

online at: https://docs.vcrma.org/images/pdf/planning/ceqa/Construction_Noise_Thresholds.pdf. Also attached as **Appendix A** to this report.

[28] Note that different descriptors are used in the Noise Study. An equivalent continuous (average) noise level represented by L_{eq} can be approximately the same as an average noise level represented by L_{50} when noise source does not varying in loudness, and the real world difference is small enough that the exceedance of the 45 dBA L50 limit remains starkly obvious.

Building Noise Reduction Factors

Building Type	Window Condition	Noise Reduction Due to Exterior of the Structure (dB(A))
All	Open	10
Light Frame	Ordinary Sash (closed)	20
	Storm Windows	25
Masonry	Single Glazed	25
	Double Glazed	35

Source: Federal Highway Administration, Highway Traffic Noise: Analysis and Abatement Guidance. December 2011.

As mentioned above, operation of just a single concrete mixer truck pouring the building foundation can generate noise levels at the exterior wall of the nearest home 220 feet away of about 72 dBA L_{eq}. With a 20 dBA noise level reduction provided by the home's wall assembly including closed windows, the interior noise level could be 52 dBA L_{eq}.

Even homes as far away as 400 feet from the Project's construction work could be exposed to exterior noise levels of approximately 67 dBA L_{eq} if intervening buildings do not block a significant amount of noise. With a 20 dBA reduction when windows are closed, the interiors of such more distant homes could exceed 47 dBA L_{eq}.[29] Those noise levels would certainly exceed the City's maximum interior limit of 35 dBA L_{eq} during concrete pour operations and create significant noise impacts.

V.4 The Temporary *Increase* in Noise Levels During Construction Would Also Create a Significant Noise Impact

CEQA requires the City to inform the public about how much of an *increase* in a project's noise levels that nearby homes will be exposed to.[30] But the Project's Noise Study, pages 43 – 45, utterly fails to describe the magnitude of the increase in noise levels these neighbors will hear during concrete mixer truck or slab pouring construction activities. This failure is serious because the increase in noise levels at nearby homes caused by nighttime concrete pouring operation will be significant.

If the ambient (existing) noise level at the closest homes "that share acoustical equivalence" in the Noise Study averaged about 65.3 dBA L_{eq} at nighttime,[31] the increase in noise levels would be

[29] Calculation: 67 dBA – 20 dB = 47 dBA.

[30] CEQA mandates the *magnitude of such an increase* be disclosed. ("A lead agency "should consider both the increase in noise levels and the absolute noise level associated with a project." (*Keep Our Mountains Quiet v. County of Santa Clara* (2015) 236 Cal.App.4th 714, 732).); *see also King and Gardiner Farms, LLC v. County of Kern et al.* (2020) 45 Cal.App.5th 814, 887 (same quote).

[31] See Noise Study, p. 24, Table 5-1 Ambient Noise Level Measurements, Location L5, Nighttime: 65.3 dBA L_{eq}. Inexplicably, the Noise Study provides no ambient noise level measurements for any of the several homes fronting on Cherry Avenue directly across the street from the proposed warehouse. Instead it uses the phrase "that share acoustical equivalence" to imply the noise level at these homes. Those are the homes that would be most severely

significant. As shown above, the average construction noise during concrete slab work at those closest homes 220 feet from the warehouse building would be about 72.5 dBA L_{eq}. The Noise Study, p. 19, identifies even a 1.5 dBA increase in community noise to be significant when the existing ambient noise levels without the Project already exceed 65 dBA, so that increase of 7.2 dBA would be clearly significant.[32]

V.5 The Project's 24-hour Average Construction Noise Level That Includes Night Work Could Exceed Permissible City Noise Standards, Even if Night Work Prohibited.

A common standard for determining the significance of noise impacts is the Day-Night Noise Level ("L_{dn}"). That is the average A-weighted noise level during a 24-hour day, obtained after the addition of 10 decibels to sound levels measured in the night between 10:00 p.m. and 7:00 a.m. The day-night average standard was adopted by the EPA for developing criteria for the evaluation of community noise exposure, and it is used by California. In this Project's nearby residential neighborhood, the 24-hour day-night average noise standard is **70 dBA L_{dn}**.[33] That is an applicable threshold of significance because noise levels greater than 70 dBA L_{dn} are considered to be "normally unacceptable" for residences.[34]

The Noise Study identifies that construction activities may occur during foundation work for all hours, day and night. If construction work emits an average of 85 dBA L_{eq} at a 50-foot distance non-stop (for example, the noise level of a single bulldozer), the day-night average noise level would be **91.4 dBA L_{dn}** as shown below. It would be even greater when several pieces of heavy equipment are working simultaneously.

> To calculate the dBA L_{dn} day-night average in this case, a level of 85.0 dBA L_{eq} is assigned to each of the Project's 15 daytime construction hours from 7:00 am to 10:00 pm, and a nighttime construction noise level also of 85.0 dBA L_{eq} is assumed for each of the remaining 9 hours.
>
> $L_{dn} = 10*LOG[(1/24) * (15 * [10EXP(0.1*L_d)] + 9 * [10EXP(0.1*(L_n + 10))])] =$
> **91.4 dBA L_{dn}** (at a 50 foot distance)

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affected by construction noise. Measurement location "L5" is described being near a home at 1919 E. Hungerford Street which is located about 100 feet away from Cherry Avenue at a distance which may not be representative of the traffic noise levels of the closest homes. Moreover, that measurement location L5 is partially shielded acoustically by buildings to its east that front on Cherry Avenue. As such, this comment letter is based on the noise measurement data at L5 that the Noise Study provides even if it is questionable.

[32] Calculation: 72.5 – 65.3 = 7.2 dB increase.

[33] The Long Beach General Plan Noise Element, p. 138, states that "L_{dn} is the recommended day-njght average sound level not to be exceeded in a 24-hour period."

[34] General Plan Guidelines, Office of Planning and Research, California, Oct. 2003, page 250, Figure 2: 70 dBA L_{dn}. Noise levels above 70 dBA L_{dn} are considered "normally unacceptable," meaning that "new construction should generally be discouraged. If new construction does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design." https://www.ca-ilg.org/sites/main/files/file-attachments/resources__General_Plan_Guidelines_2003.pdf?1350954879

(where * = multiplication; EXP = power function; $L_d = L_{eq}$ for the 15-hour daytime period from 7 am – 10 pm (85 dBA L_{eq}); $L_n = L_{eq}$ for the 9-hour nighttime period from 10:00 pm – 7:00 am: (85 dBA L_{eq})

Then at the nearest residence about 220 feet away, that 24 hour day-night average construction noise level would diminish to **78.5 dBA L_{dn}**.[35] Or at a distance up to 400 feet from such construction work where numerous homes exist west of Cherry Avenue, the day-night average noise level would be about **73.3 dBA L_{dn}**.[36] At both distances the noise impact of 24-hour construction work would be significant since greater than the 70 dBA L_{dn} threshold.

The Project's 24-hour Average Construction Noise Levels Even Without Night Work Could Also Exceed the City's Noise Standards.

If all the construction work is limited just to daytime hours, with no Project noise at nighttime from 10:00 p.m. to 7:00 a.m., the day-night average noise level would still be significant at some homes and greater than the 70 dBA L_{dn} threshold of significance. The dBA L_{dn} noise level would be about 83 dBA L_{dn} at 50 feet:

$L_{dn} = 10*LOG[(1/24) * (15 * [10EXP(0.1*L_d)] + 9 * [10EXP(0.1*(L_n + 10))])] =$ **83.0 dBA L_{dn}** (at a 50 foot distance)

(where * = multiplication; EXP = power function; $L_d = L_{eq}$ for the 15-hour daytime period from 7 am – 10 pm (85 dBA L_{eq}); $L_n = L_{eq}$ for the 9-hour nighttime period from 10:00 pm – 7:00 am: (0 dBA L_{eq})

Then at a home 220 feet away from the northwest corner of the warehouse building, that 83.0 dBA L_{dn} noise level would reduce by distance to 70.1 dBA L_{dn}.[37] That exterior day-night average noise level which would be greater than 70.0 dBA L_{dn} is considered normally unacceptable by federal and City standards. With the addition of other construction equipment noise from simultaneous use, and at distances on the Project site even closer potentially to the nearest home than 220 feet, the exceedance of this 70 dBA L_{dn} threshold could be even greater. Therefore even daytime construction work, with no work at all at nighttime, and without more noise mitigations, would have a significant noise impact to some homes west of Cherry Avenue.

The U.S. EPA considers a home's outdoor areas exposed to greater than 55 dBA L_{dn} to interfere with activity and risk peoples' health (EPA 1974, Information on levels of environmental noise, p. 40, Table 4).

[35] Calculation: At 5945 Cherry Avenue, Home "C", the exterior noise level resulting from the Project's construction work 220' (d_2) from that house, where the noise level is dB_1 = 91.4 dBA L_{dn} at 50' (d_1):
$dB_2 = dB_1 – 10 \times A \times LOG(d_2/d_1) = 91.4 – 10 \times 2.0 \times LOG(220'/50') = 91.4 - 20 \times (-0.64) =$ *78.5 dBA L_{dn}*

[36] Calc'n: $dB_2 = dB_1 – 10 \times A \times LOG(d_2/d_1) = 91.4 – 10 \times 2.0 \times LOG(400'/50') = 91.4 - 20 \times (-0.90) =$ *73.3 dBA L_{dn}*

[37] Calc'n: $dB_2 = dB_1 – 10 \times A \times LOG(d_2/d_1) = 83 – 10 \times 2.0 \times LOG(220'/50') = 83 - 20 \times (-0.64) =$ *70.1 dBA L_{dn}*

VI. NOISE STUDY FAILS TO ANALYZE SIGNIFICANT BACKUP ALARM NOISE LEVELS.

The Noise Study fails to disclose that loud noise from heavy equipment backup warning beepers that would be used could be very audible at some homes near this Project site. Backup alarms or beepers are a frequent source of complaints from neighbors, even when used only during the daytime. Backup alarms must generate a noise level at least 5 to 10 dBA above the background noise in the vicinity of the rear of the machine where a person would be warned by the alarm. Thus, they are significantly louder than the site excavation and grading equipment's noise. *Yet the Noise Study fails to disclose backup alarms would be used*, and fails to describe their decibel rating or suggest placing any limits on their loudness.

Backup alarms typically produce from 97 to 112 decibels at four feet, [38] which attenuates to about 75 to 91 dBA at 50 feet,[39] and can even be heard at the distances where the nearest neighbors live. At those noise levels, their use would exceed the City's maximum limit of 70 dBA L_{max} at 50 feet as measured at those homes. These backup alarms beep about once per second at a penetrating frequency of about 1,100 Hertz designed to be easily heard by most people.

Because these alarms have a narrow frequency or tone, the City's Noise Ordinance requires a 5 dB adjustment be added to their measured noise levels.[40] Also, the State of California Model Community Noise Control Ordinance[41] provides a more technical definition of tonal noise as the following: A pure tone shall exist if the one-third octave band sound pressure level in the band with the tone exceeds the arithmetic average of the sound pressure levels of the two contiguous one-third octave bands by 5 dB for center frequencies of 500 Hz. And above, by 8 dB for center frequencies between 160 and 400 Hz, and by 15 dB for center frequencies less than or equal to 125 Hz. Therefore, any noise source considered to consist of a pure tone(s) will be subject to a 5 dB penalty. Backup warning alarms emit pure tones. The City must apply that 5 dB penalty when assessing these alarms' noise impacts on neighbors.

A single backup warning beeper emitting 91 dBA L_{max} at 50 feet could be louder than 78 dBA L_{max} at homes 220 feet away. (Calculated being 6 dB quieter for each doubling of distance.) Noise levels of 78 dBA L_{max} could be over 20 dBA greater than the daytime background noise level of less than 60 dBA $L_{eq.}$ That large difference would make the backup alarms very intrusive at nearby homes. That noise level would greatly exceed a maximum 5 dB

[38] Source of back-up alarm noise levels from alarm manufactured by Pollak, #41-761, "Manually adjustable Back-up Alarm," rated at 112, 107, 97 dB.
[39] Noise level attenuation due to distance is calculated as reduced by about 6 dB for each doubling of distance.
[40] See LBMC § 8.18.160.
[41] California Office of Noise Control, California Department of Health. *Model Community Noise Control Ordinance.* p. 21, April 1977

increase standard used commonly throughout California. When a 5 dB penalty for its pure tone characteristic is included, the significant impact of backup beeper noise would be greater yet at 83 dBA L_{max} at the nearest homes. That increase in noise level of 13 dB greater than the City's maximum standard with backup alarm use would create a significant noise impact to the nearest residents.

The Noise Study is inadequate for failing to consider that such backup alarms will be used during construction work at least for the site preparation and the building foundation's and exterior walls' concrete pour activities.

VII. THE PROJECT'S NOISE IMPACT ON A NEIGHBORING COMMERCIAL BUILDING WOULD BE SIGNIFICANT

This Project would generate noise levels in excess of the City's noise standards at its neighboring commercial building immediately to the south. The Los Angeles County's Department of Animal Care and Control building is located about 250 feet south of the Project's proposed warehouse building. The Project's main, southern driveway for trucking and cars would be located between these two buildings, as close as about 160 feet to the County's building. But the Noise Study does not evaluate this Project's potentially serious noise impact during construction and later operations upon that nearby commercial building.

The City's threshold of significance for *average* daytime operational noise when measured at a neighboring commercial building is 60 dBA L_{eq}. The *maximum* noise level exposure threshold for such a commercial building is 75 dBA L_{max}.[42]

FIGURE 6 - Commercial Building Exposed to Loud Warehouse Project Noise



During construction and during warehouse operations, the Project's southern driveway nearest this County building would likely be used for truck traffic when hauling materials and when being accessed by workers. A single heavy truck loaded with construction or warehouse materials can, while passing by and accelerating at the end of the driveway, generate an average noise level of approximately 88 dBA L_{eq} and a maximum noise level of about 95 dBA L_{max} at 50 feet.[43] At 160 feet to the County's building, such heavy trucking noise is attenuated by distance to about **85 dBA L_{max}.**[44] That noise level of 85 dBA L_{max} or louder when truck movements occur in the driveway on the southwestern area of the Project's site would exceed the maximum measured daytime ambient noise level of 79.3 dBA L_{max} by over 5 dBA.[45] In other words, such heavy

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[42] See Long Beach General Plan Noise Element, p. 137, Table 11.

[43] See County of Ventura Construction Noise Threshold Criteria, Figure 2, Typical Construction Equipment Noise.

[44] Calculation: The maximum noise level from the passing of a loaded heavy truck at a distance of 160 feet (d_2) from the County's building south of the warehouse driveway, where dB_1 = 95 dBA L_{max} at 50' (d_1),
$dB_2 = dB_1 - 10 \times A \times LOG(d_2/d_1) = 95 - 10 \times 2.0 \times LOG(160'/50') = 95 - 20 \times (-0.50) =$ *85 dBA L_{max}*.

[45] Noise Study, PDF-1038, 24-Hour Noise Level Measurement Summary for Location L4 near 5881 Cherry Avenue (Intercity Fellowship Hall) at 10:00 a.m. (79.3 dBA L_{max})

delivery and semi-truck passings that close to this existing County building and in much greater numbers than currently occur, along with additional reflected noise from the warehouse's tall walls, and loading dock noise, would be audible and intrusive to employees and animals there.

More importantly, such truck noise would significantly exceed the City's allowable noise standards. Other site work activities closer than 160 feet would produce even louder noise levels at this commercial building, especially when more than a single piece of heavy construction equipment is operated simultaneously. The Project applicant is not proposing to install any temporary noise barrier to protect this County building that houses animals that can also be disturbed by loud construction noise. Nor is any permanent noise wall being proposed to shield some of the operational noise from such truck passings and other loading dock noise sources. That noise level there of 85 dBA L_{max} from truck passings would exceed the City's daytime threshold of significance of 75 dBA L_{max} and, therefore, is considered significant as a noise impact.

VIII. Massive Warehouse Will Create Significant Noise Level Increases at Homes West of Cherry Avenue by Reflecting Traffic Noise to the West

The Project's Noise Study entirely fails to acknowledge and analyze the severity of the noise impact to many existing homes that will occur from a large 50-foot tall warehouse that will be built over 400 feet long on the east side of Cherry Avenue. The west wall of such a huge warehouse, the height of a four-story building, will reflect existing and new traffic noise and new parking lot noise to the west where dozens of homes exist nearby. The resulting noise level increase just due to the sound energy that reflects from this building wall toward many nearby homes will be significant.

The existing project site does *not* currently have such a large building wall to reflect traffic noise:

FIGURE 7
VIEW OF PROJECT WAREHOUSE SITE AS SEEN FROM A RESIDENCE WEST OF CHERRY AVE.



But as proposed, a new and very large warehouse building's western wall would tend to reflect Cherry Avenue traffic noise in a western direction toward homes across the street:

FIGURE 8
SIMULATION OF PROJECT WAREHOUSE AS SEEN FROM A RESIDENCE WEST OF CHERRY AVE.



The Project's Noise Study measured existing noise levels near Cherry Avenue at about 67.8 dBA L_{eq} during the daytime and 65.3 dBA L_{eq} at nighttime.[46] The 24-hour weighted day-night average of those measurements is approximately 72.5 dBA L_{dn}.[47]

Then, the Noise Study's Table 4.1 describes a threshold of significance for an *increase* in noise levels during operations caused by the Project of **1.5 dBA L_{eq}** when the ambient noise level is greater than 65 dBA L_{eq}. That shows noise level measurements closest to the middle of the Project warehouse's western wall are greater than 65 dBA L_{eq}. Accordingly, if traffic noise levels increase at nearby homes by 1.5 dBA L_{eq} or more, that would constitute a significant noise impact.

Vehicular traffic on Cherry Avenue is one of the main noise sources in the existing neighborhood. It is well known that:

> "In some cases, external building facades can influence reflected noise levels affecting adjacent buildings. This is primarily a problem where high-rise buildings are proposed, and the effect is most evident in urban areas, where an urban canyon may be created."[48]

According to CalTrans:

> "A smooth, hard barrier surface, such as masonry or concrete, is considered almost perfectly reflective (i.e., almost all sound striking the barrier is reflected back toward the source and beyond). A barrier surface material that is porous, with many voids, is said to be absorptive (i.e., little or no sound is reflected back). The amount of energy absorbed by a barrier surface material is expressed as an absorption coefficient value ranging from 0 (100% reflective) to 1 (100% absorptive). A perfect reflective barrier, (= 0) will reflect back virtually all noise energy (assuming a transmission loss of 30 dBA or more) toward the opposite side of a highway. If the difference in path length between the direct and reflected noise paths to the opposite (unprotected) side of a highway is ignored, the maximum expected increase in noise will be 3 dBA." [49]

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[46] See Noise Study, p. 24, Table 5-1: 24-Hour Ambient Noise Level Measurements, at noise measurement location **L5**, west of the Project site near single-family residence: Energy Average Noise Level: 67.8 dBA L_{eq} (daytime); 65.3 dBA L_{eq} (nighttime.)

[47] Calculation: To calculate the dBA L_{dn} day-night weighted average for Cherry Avenue near the warehouse site, a level of 67.8 dBA L_{eq} is assigned to each of the 15 daytime hours from 7:00 am to 10:00 pm, and a nighttime noise level also of 65.3 dBA L_{eq} for each of the remaining 9 nighttime hours.
$L_{dn} = 10*LOG[(1/24) * (15 * [10EXP(0.1*L_d)] + 9 * [10EXP(0.1*(L_n + 10))])] =$ **72.5 dBA L_{dn}**
(where * = multiplication; EXP = power function; $L_d = L_{eq}$ for the 15-hour daytime period from 7 am – 10 pm (67.8 dBA L_{eq}); $L_n = L_{eq}$ for the 9-hour nighttime period from 10:00 pm – 7:00 am: (65.3 dBA L_{eq})

[48] Michael Brandman Associates (9/29/2011) DEIR Noise Section for Proposed City of Elk Grove Sphere of Influence Amendment, p. 3.12:4, http://www.saclafco.org/SphereofInfluenceInformation/Documents/elkgrovesoi/proposedsoi_amenddeir/sac_029402.pdf; *see also* 1020 S. Figueroa St. (DCP Case No. ENV-2015-1159-EIR) DEIR, p. 4.2:2 (noting "A receptor located on the same side of the wall as a noise source may actually experience an increase in the perceived noise level as the wall reflects noise back to the receptor, thereby compounding the noise."), http://planning.lacity.org/eir/1020SoFigueroa/DEIR/4_G_Noise.pdf; 1211 W. Pico Blvd. (DCP Case No. ENV-2011-0585-EIR) DEIR, p. IV.E:2, https://planning.lacity.org/eir/ConventionCntr/DEIR/files/IV.E%20Noise.pdf.

[49] CalTrans (Sep. 2013) Technical Noise Supplement. Part 1, p. 1:1 (prepared to provide technical background information on transportation-related noise in general and highway traffic noise in particular), https://www.sandiegocounty.gov/content/dam/sdc/pds/ceqa/Soitec-Documents/Final-EIR-Files/references/rtcref/ch2.6/2014-12-19_Caltrans_TrafficNoiseAnalysisProtocol_Part1.pdf; *see*

According to research from traffic engineering tests conducted elsewhere, when applied to this Cherry Avenue Warehouse Project, the reflected traffic noise that bounces from its building's large western facade will add about 2 dBA to the directly-radiated Cherry Avenue traffic noise levels those nearby homes are currently exposed to.[50] This warehouse's western wall will be only about 100 feet from traffic lanes on Cherry Avenue.[51] The facade-reflected noise will not be attenuated by any barrier at some homes. A 2 dBA noise level increase would be greater than the appropriate 1.5 dBA threshold of significance when existing noise levels are greater than 65 dBA L_{eq} and is therefore a significant noise impact.

The Project's cumulative noise impacts will be even greater when considering the other sources of noise the residential neighbors west of Cherry Avenue will be exposed to. That includes vehicle noise from additional traffic the warehouse operations will generate, mechanical equipment noise, and parking lot noise. So not only will this warehouse Project expose some residential neighbors to excessive noise levels that the warehouse operation generates, it additionally will expose neighbors to significantly greater noise levels originating from nearby traffic and reflecting from its tall western wall.

IX. Parking Lot and Driveway Mechanical Sweeper Use May Create Significant Noise Impacts at Some Homes West of Cherry Avenue.

The Project may occasionally employ a motorized, mechanical sweeper/vacuum to clean its large parking lot and driveway pavement areas. But that equipment can be very loud and could cause a significant noise impact to some nearby residents west of Cherry Avenue during its use. (See **Figure 4** for illustration of the distances from the western parking lot to the closest homes.)

The Noise Study never evaluates the potential noise impacts that such mechanical sweepers can cause at nighttime when parking lots are more likely to be unobstructed by parked cars. No noise mitigation or Condition of Approval was proposed to restrict such nighttime pavement cleaning. The Noise Study states that that the City of Long Beach's nighttime maximum noise standard during project operations is 65 dBA L_{max}.[52] Measurements of these mechanical sweepers/ pavement vacuums predict they can generate a maximum of 71 dBA L_{max} at a distance of 100 feet.[53] Some street sweepers are even louder.[54] Based on that measurement data, at a distance of

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also id., Part 2, p. 2:37, https://www.sandiegocounty.gov/content/dam/sdc/pds/ceqa/Soitec-Documents/Final-EIR-Files/references/rtcref/ch2.6/2014-12-19_Caltrans_TrafficNoiseAnalysisProtocol_Part2.pdf.

[50] See Noise Control Engineering Journal (Jan. 2014) Traffic Noise and Vehicle Movement at a Controlled Intersection, p. 13 (stating that: "It was found that the facade reflection correction was equal to 2 dB … The value of 2 dB for the facade reflection correction is a reasonable value. It is 1 dB lower than the value of 3 dB corresponding to incoherent summation of equal-amplitude direct and reflected sound waves. The value of 2 dB for the correction implies that the reflected sound is about 2 dB weaker than the direct sound, since the incoherent sum of 0 dB and –2 dB is 2 dB. The 2 dB attenuation of the reflected sound is caused by two effects: i) absorption of sound energy by the facade, and ii) partial screening of the sound field by the parapet."), attached hereto as "Attachment 6".

[51] Distance of 100 feet estimated from Project's Site Plan.

[52] See Noise Study, p. 15, Table 3-1, Operational Noise Standards, 10 p.m. to 7 a.m., standard is 65 dBA L_{max}.

[53] See the *Environmental Noise Assessment* for the Galt Walmart EIR in the City of Galt, CA, November 23, 2009, which states on page 30: "Based upon noise measurements of mechanical parking lot sweeping/vacuuming, noise levels from parking lot cleaning are approximately 62 dB L_{eq} and 71 dB L_{max} at a distance of 100 feet from the center

about 150 feet from the Project's Cherry Avenue side western parking lot and northern driveway to the nearest home across the street at 5945 Cherry Avenue, that sweeper noise level would be about **67.5 dBA L_{max}**.[55] That noise level exceeds the City's 65 dBA L_{max} nighttime standard and would therefore create a significant noise impact. Some other homes could also be exposed to excessive sweeper noise levels that exceed the City's 65 dBA L_{max} limit up to about 200 feet away.

Such mechanical sweeper noise would be clearly audible and disturbing at some homes as well. With the background noise level[56] at nighttime sometimes being about 51 dBA L_{90}, the sweeper noise at 67.5 dBA L_{max} would be about 16 dBA louder than the background noise level then. That represents a significant *increase* in noise level due to this project, another type of significant noise impact.

Neighbors are likely to experience significant sleep-disturbance from such intrusive noise at night. That noise level from sweeper use at the exterior of this nearest house west of Cherry Avenue would also generate interior noise levels inside this house greater than the City's maximum limit of 35 dBA per LBMC § 8.18.170(A).[57] With closed windows reducing the exterior noise level by about 20 dB, the interior noise level in the house during sweeper operations could be 47.5 dBA L_{max}, loud enough to wake residents and 12.5 dB greater than the City's maximum interior limit of 35 dBA.

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of the parking lot cleaning activities." This study will be made available to City officials if requested, and it is also available online at: https://www.cityofgalt.org/home/showdocument?id=2781

[54] See *Park Habitat Project Nighttime Construction Noise Assessment*, San José, California, July 7, 2021; page 11, Street Sweeper: 80 dBA L_{max} at 50 feet, (which reduces by distance to about **74 dBA L_{max} at 100 feet**.) This report is available online at: https://www.sanjoseca.gov/home/showpublisheddocument/77667/637685200947630000

[55] Calculation: at the home at 5945 Cherry Avenue, the noise level from the operation of a mechanical sweeper/ pavement vacuum at a location in the parking lot 150' (d_2) from the home, where dB_1 = 71 dBA L_{max} at 100' (d_1),
$dB_2 = dB_1 - 10 \times A \times LOG(d_2/d_1) = 71 - 10 \times 2.0 \times LOG(150'/100') = 71 - 20 \times (-0.64) =$ *67.5 dBA L_{max}*.

[56] See **Figure 2** above with a Location L5 Background L_{90} Noise Level of 50.7 dBA L_{90} at midnight.

[57] Calculation: exterior 67.5 dBA L_{max} – 20 dB with windows closed = 47.5 dBA L_{max} interior noise level.

X. DEFICIENCIES WITH PROJECT'S NOISE STUDY

The Project's Noise Study prepared by Urban Crossroads, Inc. is incomplete, inaccurate, and entirely conclusory, The Noise Study fails to describe the factors used in estimating the concrete slab pour work. Merely referencing some other project's noise measurements obtained at 27334 San Bernardino in the City of Redlands is inadequate under CEQA. It provides no way for the public to independently assess the veracity of such distant and also vague evidence. The Noise Study's calculation factors in Appendix 8-2 ("CadmaA" model input data) are missing essential information that would allow the public to verify the calculations. For example, none of the buildings' locations used in the calculation model are shown on any map in the Noise Study that would allow someone to check those calculations.

The Noise Study's calculations also depend upon a noise test for that Redlands concrete slab pour project with no explanation of how its purported measurement of 100.3 dBA L_w (a sound power level) is used in any agency's regulations and expressed in decibels such as dBA L_{eq}. As such, this cryptic study violates CEQA by making obscure the analytic data and reasoning that would allow the public to independently review the Noise Study's conclusions.

The Noise Study uses *average* noise levels, but never analyzes if such concrete construction noise would exceed the City's *maximum* allowed noise levels. It is those maximum noise levels that are most starkly troublesome and sleep-disturbing to nearby residents since those peak levels will be clearly audible above the ambient noise levels in their neighborhood.

The Noise Study also fails to identify on any map all the nearest homes which could be exposed to this Project's noise. Because construction noise from concrete mixer trucks that includes backup warning horns can be so loud at night, some neighboring residents west of Cherry Avenue could be significantly disturbed. If those noise levels at their homes exceed 65 dBA L_{max} at night, that construction work would create a significant noise impact.[58]

The Noise Study provides no analysis of the noise contribution to the surrounding community that will result from the addition of this warehouse Project's additional heavy truck traffic and other vehicles along major routes of travel. No traffic study is provided with traffic flow direction so that the public can assess the significance of such increased traffic noise on roads that are already excessively noisy.

The Noise Study does not indicate if the tilt-up exterior concrete walls of the warehouse will be constructed on-site or delivered from elsewhere, a factor that can affect the construction noise levels.

The Noise Study entirely fails to evaluate the potential for the Project to create significant noise impacts to the interior noise level of nearby buildings and homes.

The noise study fails to describe sufficiently where the noise level measurements were obtained and whether the noise meters were calibrated during these measurements.

[58] A threshold of significance for nighttime construction work is 65 dBA L_{max}. Source: LBMC § 8.80.150(B)(5).

XI. ADDITIONAL MITIGATION MEASURES ARE NECESSARY PURSUANT TO AN ADEQUATE MND OR EIR

Critical to the MND/EIR review process is the consideration of mitigation measures ("MMs") and project design features ("PDFs") to reduce a project's impact to less than significant, which can subsequently be made enforceable as mandatory COAs. Here, because the Project was reviewed per a categorical exemption, MMs were not analyzed or vetted by the public and, therefore, any ad hoc noise-related COAs imposed by the City at this stage would be untethered to reasoned analysis. This is a sharp deviation of the City's practice for similar projects, where it considers various standard MMs and PDFs that serve to directly or indirectly reduce a project's noise impacts below the City's thresholds of significance, which are entirely missing from the Project's current COAs. Among these operational noise-related MMs/PDFs/COAs considered for other nearby projects and/or hotel developments within the City[59]—but missing from the Project's COAs—include:

CONSTRUCTION NOISE

MM-1 TEMPORARY NOISE BARRIER[60] (with noise barrier also on driveway closure gates)

A 12-foot-tall temporary noise barrier shall be installed along the western Project site boundary, and extending a minimum of 100 feet to the east along both the northern and southern property lines starting from Cherry Avenue, for the duration of Project construction. The temporary noise barrier shall have a solid face from top to bottom and shall meet the following minimum standards:

> a) The temporary noise barrier shall provide a minimum transmission loss of 20 dBA (Federal Highway Administration, Noise Barrier Design Handbook). The noise barrier shall be constructed using an acoustical blanket (e.g. vinyl acoustic curtains or quilted blankets) attached to a construction site perimeter fence or equivalent temporary fence posts or barrier materials;

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[59] *See e.g.*, Second + PCH Development Project (Mar. 2011) EIR, pp. IV.I:312, http://www.lbds.info/civica/filebank/blobdload.asp?BlobID=3375; Belmont Pool Revitalization Project (Apr. 2016) Draft EIR, pp. 4.10:16, 19-21, 25, http://www.lbds.info/civica/filebank/blobdload.asp?BlobID=5781; Midtown Specific Plan (Mar. 2016) Final EIR, p. 4:22 (MM N-5), http://www.lbds.info/civica/filebank/blobdload.asp?BlobID=5765; Civic Center Project (Oct. 2015) Final Supplemental EIR, pp. 9:38-39 (MMs DT Noise-5-7, and SEIR Noise 2(b)), http://www.lbds.info/civica/filebank/blobdload.asp?BlobID=5574; Golden Shore Master Plan Project (Jan. 2010) Final EIR, pp. V:14- (MMs G-5, G-6), http://www.lbds.info/civica/filebank/blobdload.asp?BlobID=3330;

[60] Mitigation measures MM-1 to MM-5 are from the 2019 Draft EIR for the Slover/Cactus Avenue Warehouse Project in the County of San Bernardino, Pages S-22 to S-23. Note: MM-1 is modified by adding 100-foot long side barriers and driveway gate noise barriers. Urban Crossroads prepared this Project's noise impact analysis. The Draft EIR is available online at: http://www.sbcounty.gov/Uploads/LUS/Environmental/Alere%20Property%20Group/Slover%20and%20Cactus%20Avenue%20Warehouse%20-%20Public%20Review%20Draft%20EIR%20(November%202019).pdf

b) The noise barrier must be maintained, and any damage promptly repaired. Gaps, holes, or weaknesses in the barrier or openings between the barrier and the ground shall be promptly repaired; and

c) The noise control barrier and associated elements shall be completely removed upon the conclusion of the construction activity.

MM-2 Construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturer's standards.

MM-3 Construction contractors shall place all stationary construction equipment so that all emitted noise is generated and directed toward the center of the site and away from the noise sensitive receivers nearest the Project site.

MM-4 Construction contractors shall locate equipment staging areas on the Project site in locations that will create the greatest feasible distance between construction related noise sources and noise sensitive receivers nearest the Project site.

MM-5 Construction contractors shall ensure that delivery trucks use designated truck route(s).

MM-6 CONSTRUCTION NOISE LIMITS: As measured at nearby sensitive receptors, the maximum construction noise levels shall not exceed 70 dBA $L_{eq\text{-}1\ hr.}$ during the daytime, and 65 dBA $L_{eq\text{-}1\ hr.}$ at nighttime.

For construction noise that has an impulsive character or pure tones, these maximum noise levels will be adjusted with a 5 dB lowered limit pursuant to the California Model Noise Ordinance which includes a 5 dB penalty for noise of certain character, namely, noise that contains "a steady, audible tone such as a whine, screech, or hum, or is a repetitive noise such as hammering or riveting, or contains music or speech. " [CNMO at p. 21]

MM-7 Prohibit amplified sound system noise or loudspeaker use during construction activities.

MM-8 Prohibit backup alarms on heavy equipment, and instead using warning devices that cannot be heard from nearby residential properties to the west of Cherry Avenue.

MM-9 Require construction activities to be placed as far as possible from the nearest off-site land uses.

MM-10 Require construction and demolition activities to be scheduled to avoid operating several loud pieces of equipment simultaneously; alternatively, to reduce the overall length of the construction period, combine noisy operations to occur in the same time period if it will not be significantly greater than if operations were performed separately.

MM-11 Require the replacement of noisy equipment with quieter equipment, such as utilizing vibratory pile driver instead of conventional pile driver (or even prohibit the use of driven (impact) pile systems altogether), using rubber-tired equipment rather than track

equipment, or using quieted and enclosed air compressors with properly working mufflers on all engines.

MM-12 Require construction contractor to avoid using vibratory rollers and packers near sensitive areas of the southern side of the site near the County's Department of Animal Care and Control building.

MM-13 Require construction staging areas to be as far from sensitive receptors as reasonably possible.

MM-14 Require all construction truck traffic to be restricted to daytime hours only and to truck routes approved by the Department of Building and Safety, which shall avoid residential areas and other noise-sensitive receptors.

MM-15 Require flexible sound control curtains to be placed around all drilling apparatuses, drill rigs, and jackhammers when in use and more extensive noise control barriers protecting the nearest residential structures west of Cherry Avenue.

MM-16 Require power construction equipment operated at the project site to be equipped with effective state-of-the-art noise control devices (e.g., equipment mufflers, enclosures, and barriers) with contractors maintaining all sound-reducing devices and restrictions throughout the construction period and keeping documentation showing compliance.

MM-17 Require contractors to use either plug-in electric or solar powered on-site generators to the extent feasible.

MM-18 Require grading and construction contractors to use equipment that generates lower vibration levels such as rubber-tired equipment rather than metal-tracked equipment, such as a combination loader/excavator for light-duty construction operations.

MM-19 Install low-noise asphalt pavement only within the property.

MM-20 Two weeks before the commencement of construction at the Project Site, require notification to be provided to the immediate surrounding off-site properties located within 500 ft of the Project site that discloses the construction schedule, including the various types of activities and equipment that would be occurring throughout the construction period. A noise disturbance coordinator and hotline telephone number shall be provided to enable the public to call and address construction-related issues. The disturbance coordinator should be responsible for responding to any local complaints about construction noise. The disturbance coordinator should determine the cause of the noise complaint (e.g., starting too early, bad muffler) and should be required to implement reasonable measures to reduce noise levels.

MM-21 Require a list of all mitigation measures restricting construction activity to be posted at the Project Site on a sign legible at a distance of 50 ft and all construction personnel shall be instructed as to the nature of the noise and vibration mitigation measures.

MM-22 Require a noise monitoring/control plan that includes absolute noise limits for classes of equipment, noise limits at lot lines of specific noise sensitive properties, specific noise control treatments to be utilized (such as the above-mentioned measures), and a designated compliance officer to respond to promptly respond to complaints and take immediate correction action if limits/restrictions are not complied with.

GROUND-BORNE VIBRATION-RELATED CONSTRUCTION ACTIVITIES:

MM-23 Prior to approval of grading plans and/or prior to issuance of demolition, grading and building permits, the Applicant shall retain a Professional Structural Engineer with experience in structural vibration analysis and monitoring to perform the following tasks:

• Review the Project plans for demolition and construction.

• Survey the Project site, including geological testing, if required.

• Prepare and submit a report to the Director of Planning and Community Development to include but not be limited to the following:

- Description of existing conditions at the nearby County's Department of Animal Care and Control building;
- Vibration level limits based on building conditions, soil conditions, and planned demolition and construction methods to ensure vibration levels below the potential for damage to the County's Department of Animal Care and Control building;
- Specific measures to be taken during construction to ensure the specified vibration level limits are not exceeded; and
- If considered appropriate, a monitoring plan is to be implemented during demolition and construction that includes post-construction and post-demolition surveys of the County's Department of Animal Care and Control building.
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Examples of measures that may be specified for implementation during demolition or construction include, but are not limited to:

- Prohibition of certain types of impact equipment such as a pile driver;
- Requirement for lighter tracked or wheeled equipment;
- The specification that demolition occur by non-impact methods, such as sawing concrete;
- The specification that phasing operations avoid simultaneous vibration sources; and
- Installation of vibration-measuring devices to guide decision making for subsequent activities.

OPERATIONAL NOISE

MM-24 Perform a full traffic study to evaluate the impact of this Project's off-site trucking along the major routes of travel. Include traffic routing restrictions to forbid Project traffic in residential areas and restrain trucks and vehicles from clogging up important commuting routes used for busses and other vehicles.

MM-25 Limit diesel trucks or equipment idling to 3 minutes and post signs regarding the idling restriction.

MM-26 Prohibit trucks with refrigeration units or refrigeration trailers from operating onsite where such refrigeration equipment would be audible to neighboring residents or nearby property owners.

MM-27 Limit access in and out of the facility to the hours of 6 a.m. to 10 p.m.

MM-28 Prohibit mechanical sweeper use in the Cherry Avenue side parking lot at nighttime to eliminate its noise that will reflect off of the tall warehouse walls and will also directly reach homes west of Cherry Avenue.

MM-29 Prohibit backup alarms on heavy equipment and forklifts, and instead using warning devices that cannot be heard from nearby residential properties to the west of Cherry Avenue.

MM-30 Clearly post on the facility and on the city website how the public can make complaints of facility truck traffic outside of hours excessive dust, fumes, or odors as well as report parking issues.

MM-31 Prohibit the use of any mechanical equipment, exterior fans or HVAC equipment that is audible to residents living west of Cherry Avenue at any time of the day. Rooftops with HVAC units shall include an architectural parapet to reduce noise levels. The parapet shall be constructed along the edges of the structures' roofs. The parapet shall be at least one foot higher than the tallest rooftop equipment. No gaps or perforations shall be constructed in the parapet.

MM-32 Limit the use of the site to prohibit potential noise generating uses that otherwise are allowed by right within the zone classification of the project site.

MM-33 Prohibition of amplified sounds in outdoor spaces and/or meet specified dBA levels. Orienting any public address systems onsite away from sensitive receptors and setting system volume at a level not readily audible past the property line

MM-34 Before the issuance of a Certificate of Occupancy, require the sound levels to be measured consistent with documentation of the measurements being submitted to the Department of City Planning for the file to demonstrate specified noise levels are not exceeded at the property line.

MM-35 Post signs indicating that all parking and maintenance of trucks must be conducted within designated on-site areas and not within the surrounding community or public streets.

MM-36 Provide nearest residences affected by this Project's significant construction and operational noise impacts with sound-resistant windows and doors and/or upgraded ventilation systems as a noise mitigation measure.

Require the placement of loading and unloading areas so that Project building and features shield nearby residential and commercial land uses from loud noise generated by parking lot, loading dock and delivery activities. If necessary, additional sound barriers shall be constructed adjacent to the nearby commercial building to protect occupants from excessive noise.

Sound-Rated Windows and Glass Doors Near Commercial Use: If adequate noise barrier walls are not provided to the south of the warehouse building, the applicant shall offer and pay for sound-rated windows and glass doors at the County's building to the south. Windows shall be at least STC 35 to ensure that this Project's warehouse activities do not result in interior noise levels at the County's building exceeding 35 dBA.

CONCLUSION

As discussed above, the Project applicant has failed to provide basic information required for the City to adequately assess the true impacts of this Project. As a result, construction and operational noise impacts were never adequately analyzed. Review of these unresolved noise impacts clearly demonstrates a categorical exemption is inappropriate for the Project's CEQA review. This inapplicability is further supported by the fact that the City incorporated some Project-specific noise mitigation measures without public scrutiny that CEQA affords.

Moreover, feasible mitigation measures are available and need to be considered pursuant to a CEQA-compliant MND or EIR— just like similar projects reviewed by the City.

Sincerely,



Dale La Forest
Professional Planner, Designer, INCE Associate (Institute of Noise Control Engineering)
Dale La Forest & Associates

Attachment 1: Statement of Qualifications, Dale La Forest & Associates
Appendix A: Typical Construction Equipment Noise, County of Ventura
Appendix B: Existing Google Earth "Photographs" of Project Neighborhood

ATTACHMENT 1
Statement of Qualifications

Dale La Forest & Associates
Design, Planning & Environmental Consulting
101 E. Alma Street, Suite 100-A
Mt. Shasta, CA 96067
(530) 918-8625

INTRODUCTION

Dale La Forest & Associates provides commercial and residential design services, acoustical consulting, environmental review, project planning permitting for government approvals and multi-disciplinary environmental studies for government and private industry and citizens groups.

HIGHLIGHTS

Dale La Forest has over 47 years experience in California environmental and land use planning. He has assisted numerous citizens groups, developers and interested parties in reviewing proposed projects for compliance with planning and environmental regulations in their communities.

During the last 27 years, he has also prepared expert acoustical studies for various development projects and reviewed and commented upon dozens of noise studies prepared by others.

Dale La Forest's design, planning and environmental review experience is supported by a group of consulting planning, architectural / landscape architectural, and engineering professionals selected for their professional yet pragmatic approaches to their specialties. Teams are organized on a project-by-project basis to address project-specific issues.

EXPERIENCE

1975 – 2023 DESIGNER & PLANNER — Dale La Forest & Associates; Mt. Shasta, CA. Design of commercial, residential, subdivision planning projects and environmental and acoustical consulting for commercial and industrial firms and for the public.

Dale La Forest, Designer, INCE Associate (Institute of Noise Control Engineering)

EDUCATION

1966 – 1973 **University of Michigan,** College of Architecture and Planning - Bachelor of Architecture, 1973; and Masters studies in architecture and planning.

A C O U S T I C A L R E S E A R C H P R O J E C T S

3/17/21	Pacific Edge Hotel Remodel Project, MND, City of Laguna Beach, CA
1/25/21	Hyatt House Hotel Project, C.E., Los Angeles, CA
8/15/20	Redhills Bioenergy Project, MND, Lake County, CA
8/28/19	CitizenM Hotel Project, DEIR, Los Angeles, CA
4/15/19	Mart South Hotel Conversion Project, C.E., Los Angeles, CA
2/27/19	Citizens News Project MND, Los Angeles, CA
2/11/19	2005 James Wood Hotel Project MND, Los Angeles, CA
2/4/19	Breakers Hotel Project C.E., Long Beach, CA
1/23/19	Residence at 1888 N. Lucile Ave. MND, Los Angeles, CA
12/5/18	100 E. Sunset Bridge Housing C.E., Los Angeles, CA
11/6/18	Dewey Hotel Project C.E., Los Angeles, CA
2/12/18	Residence at 17642 Tramonto Dr., Los Angeles, CA
11/16/17	Crystal Geyser Water Company EIR, Mt Shasta, CA
8/18/17	Freeze Car Wash Project MND, Mt. Shasta, CA
3/13/17	Roseburg Water Line Project MND, Mt. Shasta, CA
1/19/17	Residence at 2056 Mandeville Canyon Rd., Los Angeles, CA
8/31/16	Austin Quarry Project EIR, Madera County, CA
10/20/15	Syar Napa Quarry Expansion Project EIR, Napa
9/30/13	Shasta Dam Raising Draft EIS, Shasta County, CA
9/30/13	Livermore Walmart Project, Livermore, CA
8/27/13	Talmage Interchange Reconstruction Project MND, Ukiah, CA
6/10/13	Townhouse Project MND, Mt. Shasta, CA
3/15/13	Costco Wholesale Store DEIR, Ukiah, CA
3/14/13	Jaxon Enterprises Asphalt Plant IS/MND, Shasta County, CA
3/14/13	Amdun LLC Asphalt Plant IS/MND, Shasta County, CA
1/30/13	Grist Creek Aggregates Project IS/MND, Mendocino County, CA
9/24/12	Austin Quarry Draft EIR, Madera County, CA
8/26/12	Tesoro Viejo Specific Plan Revised EIR, Madera County, CA
10/10/11	Eagle Peak Asphalt Batch plant MND, Callahan, CA
6/12/11	Walmart Expansion Project EIR, Poway, CA
2/20/11	McCloud Springs Ranch Subdivision MND, Siskiyou County, CA
1/4/11	Comingdeer Asphalt Batch Plant MND, Redding, CA
10/1/10	Biogreen Cogeneration Power Plant, La Pine, OR
7/13/10	Chapin Concrete Batch Plant MND, Volta, CA
1/25/10	Walmart Supercenter Draft EIR, Galt, CA
1/11/10	Doctor's Park MND, Mt. Shasta, CA
9/22/09	Livingston Concrete EIR, Placer County, CA
6/10/09	Poonkinney Quarry MND, Mendocino County, CA
5/11/09	Orchard Subdivision MND, City of Mt. Shasta, CA
1/2/09	McCloud Springs Ranch Subdivision MND, Siskiyou County, CA
10/8/02	Shasta Mountain Lodge Hotel 2 (Springhill Dr.), MND, Mt. Shasta, CA
10/10/95	Shasta Mountain Lodge Hotel 1 (Mt. Shasta Blvd.), MND, Mt. Shasta, CA

Appendix A

Typical Equipment Noise, Construction Phases and Use Factors

Figure A-1. Typical Construction Equipment Noise

Equipment Type Noise Source	Dominant Noise Components[1]	50-Foot Noise Level (L_{eq}) dBA[2, 3]	Noise Level Range (L_p) dBA[2, 3]	50-Foot Maximum Noise Level (L_{max}) dBA[2 3]
Air Compressor (portable)[4]	E, C, H, I	81	76-89	89
Air Compressor (stationary)	E, C, H, I	82	76-89	89
Auger, Drilled Shaft Rig	E, C, F, I, W	82	76-89	89
Backhoe	E, C, F, I, H, W	85	81-90	90
Bar Bender	E, P, W	82	78-88	85
Chain Saw	E, W, C	85	72-88	88
Compactor	E, C, F, I, W	82	81-85	85
Concrete Batch Plant	W, E, C	92	80-96	96
Concrete Mixer (small trailer)	W, E, C	67	65-68	68
Concrete Mixer Truck	E, C, F, W, T	85	69-89	89
Concrete Pump Trailer	E, C, H	82	74-84	84
Concrete Vibrator	W, E, C	76	68-81	81
Crane, Derrick	E, C, F, I, T	88	79-90	90
Crane, Mobile	E, C, F, I, T	83	80-85	85
Dozer (Bulldozer)	E, C, F, I, H	80	77-90	90
Excavator	E, C, F, I, H, W	87	83-92	92
Forklift	E, C, I, W	84	81-86	86
Front End Loader	E, C, F, I, H	79	77-90	90
Generator	E, C	78	71-87	87
Gradall	E, C, F, I, W	82	78-85	85
Grader	E, C, F, I, W	85	79-89	89
Grinder	W	80	75-82	82
Hydraulic Hammer	W, E, C, H	102	99-105	105
Impact Wrench	W, P	85	75-85	85
Jack Hammer	P, W, E, C	82	75-88	88
Paver	E, D, F, I	89	82-92	92
Pile Driver (Impact/ Sonic/ Hydraulic)	W, P, E	101 / 96 / 65	94-107 / 90-99 / 65	107 / 99 / 65
Pavement Breaker	W, E, P	82	75-85	85
Pneumatic Tool	P, W, E, C	85	78-88	88
Pump	E, C	76	68-80	80
Rock Drill	W, E, P	98	83-99	99
Roller	E, C, F, I, W	74	70-83	83
Sand Blaster	W, E, C, H, I	85	80-87	87
Saw, Electric	W	78	59-80	80
Scraper	E, C, F, I, W	88	82-91	91
Shovel	E, C, F, I, W	82	77-90	90
Tamper	W, E, C	86	85-88	88
Tractor	E, C, F, I, W	82	77-90	90
Trencher		83	81-85	85
Trucks (Under Load)	E, C, F, I, T	88	81-95	95
Water Truck	W, E, C, F, I, T	90	89-94	94
Other Equipment with Diesel	E, C, F, I	82	75-88	88

Note 1. Ranked noisy components. C=Casing, E=Exhaust, F=Fan, H=Hydraulics, I=Intake air, P=Pneumatic exhaust, T=Transmission, W=Work tool.
Note 2. Table based on EPA studies and measured data from various construction equipment and manufacturer's data.
Note 3. Equipment noise levels are at 50 feet from individual construction equipment and with no other noise contributors.
Note 4. Portable air compressor rated at 75 cfm or greater and operating at greater than 50 psi.

Appendix A: **County of Ventura, Construction Noise Threshold Criteria (2010)**
https://docs.vcrma.org/images/pdf/planning/ceqa/Construction_Noise_Thresholds.pdf

Appendix B - Existing Google Earth "Photographs" of Project Neighborhood

Figure 9 – Homes and Businesses Across Cherry Avenue from Project Site (Southern portion)



Figure 10– Homes and Businesses Across Cherry Ave. from Project Site (Northern portion)

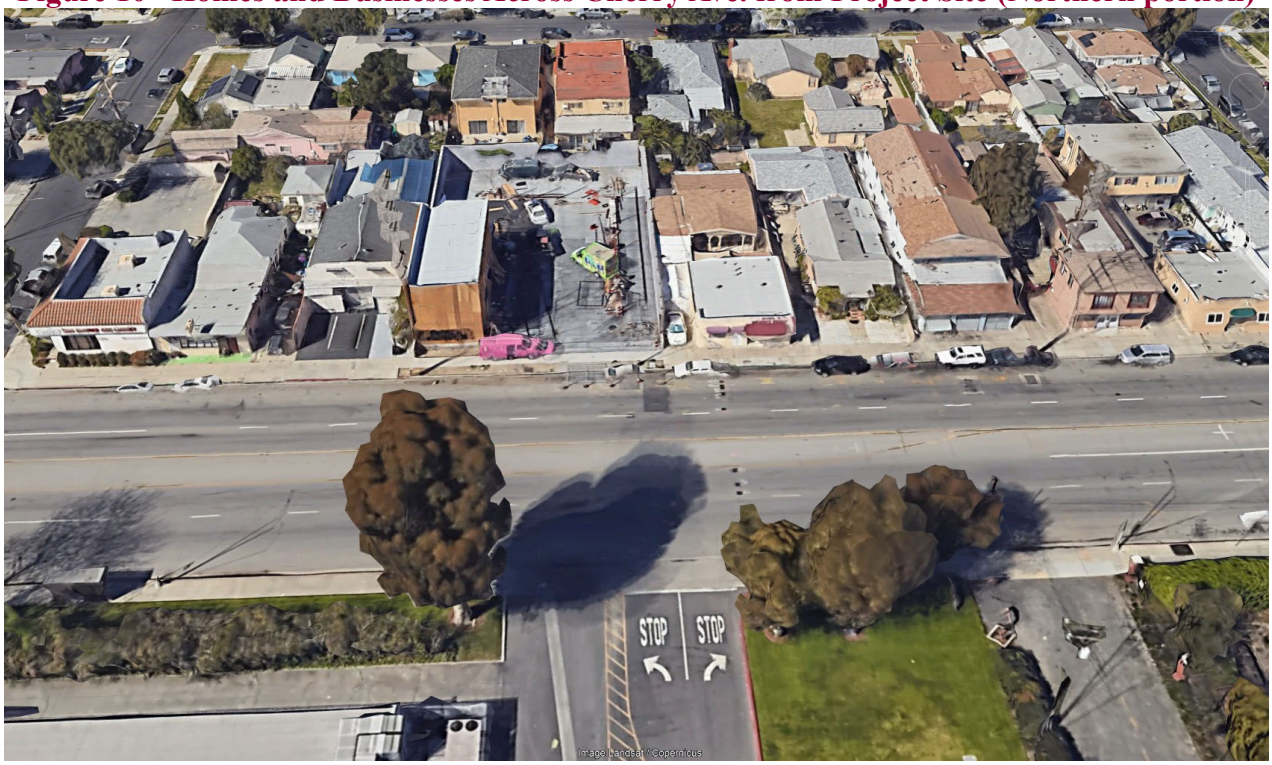
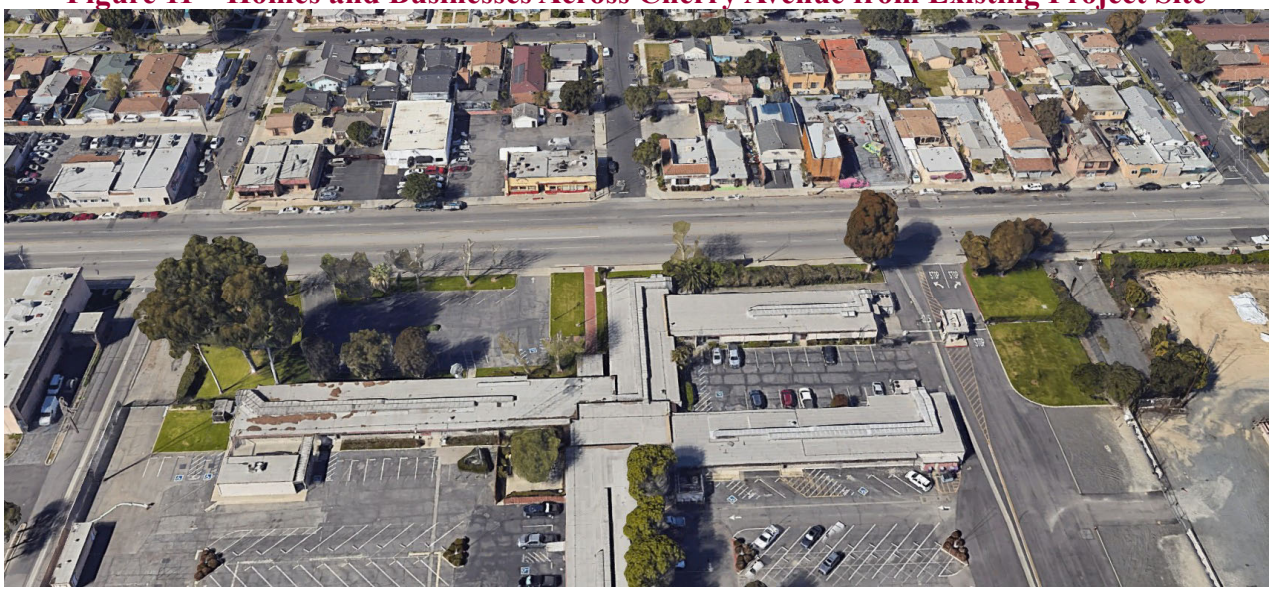


Figure 11 – Homes and Businesses Across Cherry Avenue from Existing Project Site



Note: Figures 9 and 10 above are essentially segmented enlargements of the upper half of this Figure 11.

EXHIBIT B

URBAN SYSTEMS ASSOCIATES, INC.
PLANNING & TRAFFIC ENGINEERING, MARKETING & PROJECT SUPPORT
CONSULTANTS TO INDUSTRY AND GOVERNMENT

MEMO

ATTN:	***Jordan Sisson*** ***Law Office of Jordan R. Sisson***		***E-Mail:*** ▼ jordan@jrsissonlaw.com
FROM:	***Justin P. Schlaefli, PE TE***		***TOTAL PAGES (Including Cover):***
DATE:	***April 5, 2023***	***TIME: 10:15:32 AM***	***JOB NUMBER: N/A***
SUBJECT:	***5910 Cherry Ave- Transportation and VMT Comments***		

Confidential Communications
This transmittal is intended for the recipient named above. Unless otherwise expressly indicated, this entire communication is confidential and privileged information. If you are not the intended recipient, do not disclose, copy, distribute or use this information. If you received this transmission in error, please notify us immediately by telephone, at our expense and destroy the information.

I have reviewed the information provided on the City of Long Beach website concerning analysis of the proposed 303,972-square-foot concrete, tilt-up industrial warehouse building, including 9,000-square-feet of office space at 5900/5910 Cherry Avenue in Long Beach. After reviewing the file, I conclude that the analysis of transportation impacts of the project is inconclusive.

Specifically, the project was analyzed as a traditional Land Use 155 (High Cube Warehouse Non-Sort) with up to 15% cold storage warehouse. Trip generation assumptions are fundamental to all conclusions related to transportation including Vehicle Miles Traveled (VMT) and level of service (LOS) impacts and mitigation. Therefore, it is critical for screening and analysis purposes to properly analyze trip generation for a project site. Within the warehouse category, there have been substantial changes in the past several years as supply-chain and logistics models have evolved with e-commerce and other variables. As a result, traditional warehouse which had relatively low trip generation is no longer common for larger warehouse projects (exceeding 200,000 sf). This has led to shifts in industry standard references such as ITE, Trip Generation as well as localized studies such as NAIOP and South Coast AQMD. Primary findings from some of these studies include the following from an October 2016 study of high-cube warehouse trip generation:

"The HCW market continues to evolve as individual tenants/owners implement different ecommerce business plans. For example, some deliver goods to the customer within two days and others deliver orders to the nearest store for customer pick-up. As business plans and technology continue to evolve, these should continue to be monitored. Although the tenant or its planned operations are often unknown at the time of site development review, for the purpose of estimating vehicle trip generation, it may be as important to know the tenant as much as other facility factors",
(https://www.ite.org/pub/?id=a3e6679a%2De3a8%2Dbf38%2D7f29%2D2961becdd498).

Due to the wide variation in trip rates noted, it is recommended that a site either commit to a particular category of user and/or evaluate the worst-case allowable under zoning and entitlements. If this process were followed, a worst-case analysis would lead to additional analysis and would not be screened out of providing either VMT or

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LOS analysis under the City's guidelines. It is noted that a proposed condition of approval for the subject project involves trip generation monitoring:

TRAFFIC AND TRANSPORTATION

y. Applicant shall provide a trip generation and trip distribution analysis. Based on these studies, a traffic impact analysis may be required. Any conditions generated by the analysis shall be made a part of these conditions.

It is recommended that this trip generation and trip distribution analysis not be delayed or deferred for the proposed project. In addition, *either limitations on use consistent with the trip generation analyzed for the project in advance of hearing should be imposed or the worst-case scenario, consistent with entitlements should be utilized in determining whether a project is screened out of additional analysis*. This is critical to understanding the full impacts of a proposed project.

Furthermore, the Project's VMT analysis's conclusion that the project meets the Small Project Low Trip Generator screening criteria is incorrect. This determination is premised on the project resulting in a net increase of 448 vehicle trip-ends per day and below the 500 average daily trip (ADT) threshold under the City of Long Beach Traffic Impact Analysis Guidelines (June 2020) (City Guidelines).[1] However, there are several flaws with this analysis.

First, nowhere does the City Guidelines mention industrial uses as being eligible for the small project screening criteria (see City Guidelines, p. 5). The logic of this small project criteria is echoed in the Governor's Office of Planning and Research released a Technical Advisory on Evaluating Transportation Impacts in CEQA (December of 2018) (OPR Technical Advisory).[2] OPR's screening threshold of 110 daily trips is premised on relatively small projects of 10,000 square feet, including general office building, single tenant office building, office park, and business parks (see OPR Technical Advisory, p. 12). Here, the project replaces 32,815 square feet of existing office/building uses into a 303,972 square foot warehouse development for a *net 271,157 square foot increase in uses—well above 10,000 square feet and any common understanding of a typical small project*.

Second, the City's small project threshold is 500 ADTs—not 500 vehicle trip ends (see City Guidelines, pp. 4-5.) The VMT analysis 448 daily vehicle trip ends are based on the difference between the proposed 564 actual vehicle trips (i.e., 470 passenger car trips + 94 truck trips) and existing 116 actual vehicle trips (i.e., 112 passenger car trips + 4 truck trips). This analysis *fails to convert the truck trips into passenger care equivalent (PCE)*, as mentioned in the City Guidelines (p. 16) indicating a "PCE factor of 2.0 should be used for all heavy-duty trucks." This is what the Project did for its LOS analysis, which clearly indicates that existing uses generate 120 PCE daily trips compared to the proposed warehouse generating 658 PCE daily trips—for a net increase in 538 PCE daily trips,[3] which exceeds the 500 ADT threshold.

Please refer to the attached resume for my credentials and information.

[1] https://www.longbeach.gov/globalassets/lbds/media-library/documents/planning/environmental/environmental-planning/tia-guidelines.
[2] https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf.
[3] See Urban Crossroads Cherry Avenue Warehouse Traffic Assessment (Mar. 30, 2022), Tbl. 4.

URBAN SYSTEMS ASSOCIATES, INC.
PLANNING & TRAFFIC ENGINEERING

Justin P. Schlaefli

President



EDUCATION AND LICENSES

Bachelor of Science, Civil Engineering
San Diego State University 2005
Master of Civil Engineering
Norwich University 2007
Registered Civil Engineer
California RCE# 74670, 2009
Registered Traffic Engineer
California RTE# 2564, 2010
IMSA Level II Signal Technician—Field
Certified Fiber Optic Technician

EXPERIENCE

Urban Systems Associates Inc.-
Engineering Technician, Project Manager,
Senior Project Manager
Contract City Traffic Engineer-
Calimesa, Wildomar, Rialto & Hesperia
National Academy of Sciences,
Transportation Research Board
Traffic Advisory Committee-
County of San Diego

PROJECT EXPERIENCE

CV Sync- CVAG
City of Chula Vista Adaptive System
Lusk Boulevard Adaptive System (Design/Build)
Main Street Corridor Signal Improvement and
Synchronization Program (Design/Build)
City of Hesperia
Riverwalk Master Plan
Camino Del Rio Mixed-Use
As-Needed ITS Services
City of Hesperia
Contract Traffic Engineering Services
City of Hesperia
City of Wildomar
City of Rialto
City of Calimesa
ViaSat Pedestrian Signal
Signal Synchronization System-
Coachella Valley Association of Gov.
El Corazon Roundabouts–
Sudberry Properties
Citywide Engineering & Traffic Survey
Ciry of Coachella

SPECIAL SKILLS

Environmental Impact Assessment (Transportation)
Civil & Traffic Engineering
Project Management
Construction Management
Business Management
Expert Witness
Access Evaluation
Parking Evaluation
Traffic Simulation/Forecasting
Roundabout Analysis
Geographic Information System (GIS)
Traffic Operations
ITS/Adaptive Traffic Control Systems
Traffic Signal Timing
Construction Management

Responsibilities/ Qualifications

Mr. Schlaefli is President of Urban Systems Associates. He is responsible for managing projects on a day-to-day basis as well as interfacing with other project team members and decision makers/ government staff. He has over seventeen years of experience specializing in Transportation Planning, Construction, Traffic Engineering and Traffic Operations. He has experience working on both public sector projects as well as private sector development. His experience ranges from conducting traffic studies to specialized access analysis, parking studies, trip generation studies, traffic micro-simulation, signal operations, traffic control and design/selection of ITS solutions. In addition, Mr. Schlaefli has served as a subject matter expert in court, for the State of California and for vendors in the transportation industry. Mr. Schlaefli has also served as adjunct faculty at San Diego State University teaching our next generation of Transportation Engineers.

Mr. Schlaefli's unique experience includes creating Urban Systems' industry-leading Signal Lab. This Lab is designed to test and integrate the latest technology and is intended to assist Urban Systems in solving some of the most complex traffic operations challenges. In addition to creating the Signal Lab, Mr. Schlaefli has field experience leading design/build teams and serving as a Resident Engineer involved in the upgrade and synchronization of almost 150 traffic signals. Additionally, Mr. Schlaefli has served as Contract Traffic Engineer for multiple municipalities. This diverse and wide-ranging experience in the office, the field and the lab keeps Urban Systems at the forefront of the transportation industry.

EXHIBIT C

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

2656 29th Street, Suite 201
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Paul E. Rosenfeld, PhD
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April 3, 2023

Jordan Sisson
Law Office of Gideon Kracov
801 S. Grand Ave., 11th Floor
Los Angeles, CA 90017

Subject: Comments on the Cherry Avenue Warehouse Project

Dear Mr. Sisson,

We have reviewed the October 2022 Staff Report for the Cherry Avenue Warehouse ("Project") located in the City of Long Beach ("City"). The Project proposes to construct a 303,972-square-foot ("SF") warehouse, 9,000-SF of office space, and 559 parking spaces on the 14.16-acre site.

Our review concludes that the Staff Report fails to adequately evaluate the Project's air quality, health risk, and greenhouse gas impacts. As a result, emissions and health risk impacts associated with construction and operation of the proposed Project are underestimated and inadequately addressed. A full CEQA analysis should be prepared to adequately assess and mitigate the potential hazards, hazardous materials, air quality, health risk, and greenhouse gas impacts that the project may have on the environment.

Air Quality

Unsubstantiated Input Parameters Used to Estimate Project Emissions

The Air Quality Impact Analysis ("AQIA"), included in Attachment E to the Staff Report, relies on emissions calculated with California Emissions Estimator Model ("CalEEMod") Version 2020.4.0 (AQIA, p. 39).[1] CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act ("CEQA") requires that such

[1] "CalEEMod Version 2020.4.0." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* http://www.aqmd.gov/caleemod/download-model.

changes be justified by substantial evidence. Once all of the values are inputted into the model, the Project's construction and operational emissions are calculated, and "output files" are generated. These output files disclose to the reader what parameters are utilized in calculating the Project's air pollutant emissions and make known which default values are changed as well as provide justification for the values selected.

When reviewing the Project's CalEEMod output files, provided in the AQIA and the Greenhouse Gas Analysis ("GHG Analysis") within Attachment E to the Staff Report, we found that several model inputs are not consistent with information disclosed in the Staff Report. As a result, the Project's construction and operational emissions may be underestimated. A full CEQA analysis should be prepared to include an updated air quality analysis that adequately evaluates the impacts that operation of the Project will have on local and regional air quality.

Failure to Substantiate Potential Cold Storage Requirements

Review of the CalEEMod output files demonstrates that the "Cherry Avenue Warehouse (Construction – Unmitigated)" and "Cherry Avenue Warehouse (High-Cube Cold Storage Operations)" models include a portion of the proposed warehouse space as refrigerated (see excerpt below) (Attachment E, pp. 147, 182, 285, 299, 439, 530).

"Cherry Avenue Warehouse (Construction – Unmitigated)"

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area
Refrigerated Warehouse-No Rail	45.60	1000sqft	1.05	45,596.00
Unrefrigerated Warehouse-No Rail	258.38	1000sqft	5.93	258,376.00
Other Asphalt Surfaces	261.15	1000sqft	6.00	261,149.00
Parking Lot	338.00	Space	1.18	51,714.00

"Cherry Avenue Warehouse (High-Cube Cold Storage Operations)"

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area
Refrigerated Warehouse-No Rail	45.60	1000sqft	1.05	45,596.00
User Defined Industrial	45.60	User Defined Unit	0.00	0.00

As demonstrated above, the models include only 45,596-SF of the proposed warehouse space as refrigerated. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[2] According to the "User Entered Comments & Non-Default Data" table, the justification provided for these changes is:

> "Total Project area is 14.16 acres" (Attachment E, pp. 147, 182, 439).

Furthermore, regarding the amount of cold storage required for the proposed warehouse, the Traffic Assessment ("TA"), included in Attachment E to the Staff Report, states:

[2] "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 1, 14.

> "For the purposes of this assessment, the Project will be evaluated assuming 15% cold storage and 85% high-cube fulfillment (non-sort)" (Attachment E, pp. 1).

However, the claim that only 15% of the proposed warehouse would be used as cold storage is unsubstantiated, as the Staff Report and associated documents fail to justify or provide a source for this assumption whatsoever.

Furthermore, the Staff Report and associated documents fail to identity or reference the future tenants of the Project site. As the future tenants of the Project site are currently unknown, such tenants may require additional cold storage for operation. Absent additional information, we cannot verify that the inclusion of only 45,596-SF of refrigerated warehouse space is an accurate representation of the expected cold-storage requirements.

This presents an issue, as refrigerated warehouses release more criteria air pollutant and GHG emissions when compared to unrefrigerated land uses for three reasons. First, warehouses equipped with cold storage, such as refrigerators and freezers, are known to consume more energy when compared to warehouses without cold storage.[3] Second, warehouses equipped with cold storage typically require refrigerated trucks, which are known to idle for much longer when compared to unrefrigerated hauling trucks.[4] Lastly, according to a July 2014 *Warehouse Truck Trip Study Data Results and Usage* presentation prepared by the South Coast Air Quality Management District ("SCAQMD"), hauling trucks that require refrigeration result in greater truck trip rates when compared to non-refrigerated hauling trucks.[5] Furthermore, as discussed by SCAQMD, "CEQA requires the use of 'conservative analysis' to afford 'fullest possible protection of the environment.'"[6] As such, the AQIA must provide substantial evidence for the inclusion of only 15% of the total warehouse as cold storage space. Otherwise, an updated model should be prepared to include the entire warehouse land use as refrigerated in order account for the additional emissions that refrigeration requirements may generate.

By failing to account for all potential cold storage requirements, the model may underestimate the Project's construction-related and operational emissions and should not be relied upon to determine Project significance. A full CEQA analysis should be prepared to account for the possibility of additional cold storage needs by future tenants.

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[3] "Warehouses." Business Energy Advisor, *available at*: https://ouc.bizenergyadvisor.com/article/warehouses.
[4] "Estimation of Fuel Use by Idling Commercial Trucks." Transportation Research Record Journal of the Transportation Research Board, January 2006, p. 8, *available at:* https://www.researchgate.net/publication/245561735_Estimation_of_Fuel_Use_by_Idling_Commercial_Trucks.
[5] "Warehouse Truck Trip Study Data Results and Usage" Presentation. SCAQMD Mobile Source Committee, July 2014, *available at:* http://www.aqmd.gov/docs/default-source/ceqa/handbook/high-cube-warehouse-trip-rate-study-for-air-quality-analysis/finaltrucktripstudymsc072514.pdf?sfvrsn=2, p. 7, 9.
[6] "Warehouse Truck Trip Study Data Results and Usage" Presentation. SCAQMD Inland Empire Logistics Council, June 2014, *available at*: http://www.aqmd.gov/docs/default-source/ceqa/handbook/high-cube-warehouse-trip-rate-study-for-air-quality-analysis/final-ielc_6-19-2014.pdf?sfvrsn=2.

Underestimated Parking Land Use Size

According to the Staff Report:

> "The plans demonstrate that additional parking could be provided for future site and building reconfigurations ensuring consistency with the NI PlaceType and allowing flexibility to accommodate more jobs-dense uses on the site. The project has demonstrated that the ability to convert building area and reconfigure parking areas to accommodate the NI PlaceType parking ratio of three spaces per 1,000-square feet of building area and the ability to retrofit the building for smaller scale light industrial and creative uses. *This would allow for 559 stalls,* mostly configured within the building and some reconfiguration of the exterior parking stalls" (emphasis added) (p. 3)

As such, the model should have included a 559 parking spaces. However, review of the CalEEMod output files demonstrates that the "Cherry Avenue Warehouse (Construction – Unmitigated)" and "Cherry Avenue Warehouse (High-Cube Fulfillment Operations)" models include only 338 parking spaces (see excerpt below) (Attachment E, pp. 147, 182, 251, 267, 439, 506).

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area
Unrefrigerated Warehouse-No Rail	258.38	1000sqft	5.93	258,376.00
User Defined Industrial	258.38	User Defined Unit	0.00	0.00
Parking Lot	338.00	Space	1.19	51,714.00
Other Asphalt Surfaces	261.15	1000sqft	6.00	261,149.00

As demonstrated above, the amount of parking spaces included in the models is underestimated by 221 spaces.[7] This underestimation presents an issue, as the square footage of parking land uses is used for certain calculations such as determining the area to be painted and stripped (i.e., VOC emissions from architectural coatings) and area to include lighting (i.e., energy impacts).[8] By underestimating the proposed parking land use size, the models may underestimate the Project's construction-related and operational emissions and should not be relied upon to determine Project significance.

Unsubstantiated Reductions to Architectural Coating Emission Factors

Review of the CalEEMod output files demonstrates that the "Cherry Avenue Warehouse (Construction – Unmitigated)" model includes reductions to the default architectural coating emission factors (see excerpt below) (Attachment E, pp. 148, 183, 440).

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00

As demonstrated above, the nonresidential exterior and interior architectural coating emission factors are reduced from the default values of 100- to 50-grams per liter ("g/L"). As previously mentioned, the

[7] Calculated: (559 total vehicle stalls) – (338 modeled stalls) = 221 underestimated stalls.
[8] "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 29.

CalEEMod User's Guide requires any changes to model defaults be justified.[9] According to the "User Entered Comments & Non-Default Data" table, the justification provided for these changes is:

> "Rule 1113" (Attachment E, pp. 148, 183, 440).

Furthermore, regarding rules and regulations that would apply to the proposed project, the AQIA states:

> "SCAQMD RULE 1113 This rule serves to limit the Volatile Organic Compound (VOC) content of architectural coatings used on projects in the SCAQMD. Any person who supplies, sells, offers for sale, or manufactures any architectural coating for use on projects […]
>
> Although the Project would comply with the above regulatory requirements, it should be noted that emission reductions associated with Rules 401, 402, 1301, and 2305 cannot be quantified in the California Emissions Estimator Model (CalEEMod) and are therefore not reflected in the emissions presented herein. Conversely, Rule 403 (Fugitive Dust) (2) and Rule 1113 (Architectural Coatings) (3) can be modeled in CalEEMod. As such, credit for Rule 403 and Rule 1113 have been taken in the analysis." (p. 2, 3).

However, these reductions remain unsubstantiated, as we cannot verify the accuracy of the revised architectural coating emission factors based on SCAQMD Rule 1113 alone. The SCAQMD Rule 1113 Table of Standards provides the required VOC limits (grams of VOC per liter of coating) for 57 different coating categories.[10] The VOC limits for each coating varies from a minimum value of 50 g/L to a maximum value of 730 g/L. As such, we cannot verify that SCAQMD Rule 1113 substantiates reductions to the default coating values without more information regarding what category of coating will be used. As the Staff Report and associated documents fail to explicitly require the use of a specific type of coating which would adhere to a specific VOC limit, we are unable to verify the model's revised emission factors.

These unsubstantiated reductions present an issue, as CalEEMod uses the architectural coating emission factors to calculate the Project's reactive organic gas/volatile organic compound ("ROG"/"VOC") emissions.[11] By including unsubstantiated reductions to the default architectural coating emission factors, the model may underestimate the Project's construction-related ROG/VOC emissions and should not be relied upon to determine Project significance.

Unsubstantiated Changes to Individual Construction Phase Lengths

Review of the CalEEMod output files demonstrates that the "Cherry Avenue Warehouse (Construction – Unmitigated)" model includes several changes to the default individual construction phase lengths (see excerpt below) (Attachment E, pp. 148, 183, 440).

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[9] "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 1, 14.

[10] SCAQMD Rule 1113 Advisory Notice." SCAQMD, February 2016, *available at:* http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/r1113.pdf?sfvrsn=24, p. 1113-14, Table of Standards 1.

[11] "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 35, 40.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	30.00	35.00
tblConstructionPhase	NumDays	300.00	191.00
tblConstructionPhase	NumDays	20.00	40.00

As a result of these changes, the model includes the following construction schedule (see excerpt below) (Attachment E, pp. 154, 189, 445, 446).

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
1	Demolition/Crushing	Demolition	1/15/2023	2/17/2023	5	25
2	Site Preparation	Site Preparation	2/18/2023	3/3/2023	5	10
3	Grading	Grading	3/4/2023	4/21/2023	5	35
4	Building Construction	Building Construction	4/22/2023	1/15/2024	5	191
5	Paving	Paving	12/19/2023	1/15/2024	5	20
6	Architectural Coating	Architectural Coating	11/21/2023	1/15/2024	5	40

As demonstrated above, the demolition phase is increased by 25%, from the default value of 20 to 25 days; the grading phase is increased by 17%, from the default value of 30 to 35 days; the building construction phase is decreased by 36%, from the default values of 300 to 191 days; and the architectural coating phase is increased by 100%, from the default value of 20 to 40 days. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[12] According to the "User Entered Comments & Non-Default Data" table, the justification provided for these changes is:

> "Construction anticipated to begin in January 2023 and end January 2024" (Attachment E, pp. 147, 182, 439).

Furthermore, regarding the Project's anticipated construction schedule, the AQIA provides the following table (see excerpt below) (Attachment E, p. 41).

Construction Activity	Start Date	End Date	Days
Demolition/Crushing	01/15/2023	02/17/2023	25
Site Preparation	02/18/2023	03/03/2023	10
Grading	03/04/2023	04/21/2023	35
Building Construction	04/22/2023	01/15/2024	191
Paving	12/19/2023	01/15/2024	20
Architectural Coating	11/21/2023	01/15/2024	40

[12] "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 1, 14.

However, the changes to the induvial construction phase lengths remain unsubstantiated. While the AQIA indicates the total construction duration, the Staff Report fails to provide a source for the above table to justify the *individual* construction phase lengths. This is incorrect, as according to the CalEEMod User's Guide:

> "CalEEMod was also designed to allow the user to change the defaults to reflect site- or project-specific information, when available, provided that the information is supported by substantial evidence as required by CEQA." [13]

As such, until additional information becomes available that substantiates the revised *individual* construction phase lengths, we are unable to verify the changes included in the model. Instead, the model should have proportionately altered all phase lengths to match the proposed construction duration of one year.[14]

These unsubstantiated changes present an issue, as the construction emissions are improperly spread out over a longer period of time for some phases, but not for others. According to the CalEEMod User's Guide, each construction phase is associated with different emissions activities (see excerpt below).[15]

> ***Demolition*** involves removing buildings or structures.
>
> ***Site Preparation*** involves clearing vegetation (grubbing and tree/stump removal) and removing stones and other unwanted material or debris prior to grading.
>
> ***Grading*** involves the cut and fill of land to ensure that the proper base and slope is created for the foundation.
>
> ***Building Construction*** involves the construction of the foundation, structures and buildings.
>
> ***Architectural Coating*** involves the application of coatings to both the interior and exterior of buildings or structures, the painting of parking lot or parking garage striping, associated signage and curbs, and the painting of the walls or other components such as stair railings inside parking structures.
>
> ***Paving*** involves the laying of concrete or asphalt such as in parking lots, roads, driveways, or sidewalks.

By disproportionately altering and extending some of the individual construction phase lengths without proper justification, the model assumes there are a greater number of days to complete the construction activities required by the prolonged phases. As a result, there will be less construction activities required per day and, consequently, less pollutants emitted per day. Therefore, the model may underestimate the peak daily emissions associated with some phases of construction and should not be relied upon to determine Project significance.

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[13] "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 13, 14.
[14] See Attachment A for proportionally altered construction phases.
[15] "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 32.

Unsubstantiated Reductions to Demolition Hauling Trips

Review of the CalEEMod output files demonstrates that the "Cherry Avenue Warehouse (Construction – Unmitigated)" model includes a change to the default demolition hauling trips (see excerpt below) (Attachment E, pp. 149, 184, 441).

Table Name	Column Name	Default Value	New Value
tblTripsAndVMT	HaulingTripNumber	1,730.00	0.00

As a result of these changes, the models include zero hauling trips for the demolition phase of construction (see excerpt below) (Attachment E, pp. 155, 189, 445, 456).

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number
Demolition/Crushing	7	18.00	10.00	0.00
Site Preparation	7	18.00	4.00	0.00
Grading	8	20.00	14.00	0.00
Building Construction	16	259.00	74.00	0.00
Paving	6	15.00	0.00	0.00
Architectural Coating	1	52.00	0.00	0.00

As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[16] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is:

> "Vendor Trips adjusted based on CalEEMod Defaults for Building Construction and number of days for Demolition/Crushing, Site Preparation, Grading, and Building Construction" (Attachment E, pp. 148, 183, 440).

However, this is insufficient, as the justification fails to discuss the reductions to the hauling trip numbers. Furthermore, according to the AQIA:

> "The site is currently developed with existing asphalt/concrete and buildings which will be demolished. Demolition of the existing asphalt/concrete and buildings will result in approximately 17,500 total tons of material that would be demolished, crushed, and stockpiled on-site to be used as fill" (p. 39).

However, these changes remain unsubstantiated, as the AQIA fails to provide any further information regarding the intended use of the materials generated during demolition. While the AQIA claims that the material would be "stockpiled on-site to be used as fill," we cannot verify that *all* of the material

[16] "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 1, 14.

would be used as fill. As such, some of the demolition material may eventually need to be exported off site, thus generating hauling trips. By reducing the model's construction hauling trip numbers to zero, the model may underestimate the hauling trips required during demolition of the existing buildings.

This potential underestimation presents an issue, as CalEEMod uses the number of hauling trips to estimate the construction-related emissions associated with on-road vehicles. [17] By failing to include any hauling trips for the demolition phase of construction, the model may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

Updated Analysis Indicates a Potentially Significant Air Quality Impact

In an effort to more accurately estimate the Project's construction-related emissions, we prepared an updated CalEEMod model, using the Project-specific information provided by the Staff Report. In our updated model, we omitted the unsubstantiated changes to the architectural and area coating emission factors and hauling trip numbers; proportionately altered the individual construction phase lengths; and included the correct number of parking spaces.[18]

Our updated analysis estimates that the Project's construction-related VOC emissions would exceed the applicable South Coast Air Quality Management District ("SCAQMD") threshold of 75-pounds per day ("lbs/day"), as referenced by the AQIA (p. 42, Table 3-5) (see table below).[19]

SWAPE Criteria Air Pollutant Emissions	
Construction	**VOC** (lbs/day)
AQIA	43.92
SWAPE	227.61
% Increase	418%
SCAQMD Threshold	**75**
Exceeds?	***Yes***

As you can see in the table above, the Project's construction-related VOC emissions, as estimated by SWAPE, increase by approximately 418% and exceed the applicable SCAQMD significance threshold. Thus, our updated model demonstrates that the Project would result in a potentially significant air quality impact that was not previously identified or addressed in the Staff Report. As a result, a full CEQA analysis should be prepared to adequately assess and mitigate the potential air quality impacts that the Project may have on the surrounding environment.

[17] "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 34.
[18] See Attachment B for updated air modeling.
[19] "South Coast AQMD Air Quality Significance Thresholds." SCAQMD, April 2019, *available at*: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf.

Diesel Particulate Matter Emissions Inadequately Evaluated

The Mobile Source Health Risk Assessment ("HRA Report"), included within Attachment E to the Staff Report, concludes that the proposed Project would result in a less-than-significant health risk impact based on a quantified construction and operational health risk assessments ("HRAs"). Specifically, the HRA Report estimates that the maximum incremental cancer risk posed to nearby, existing residential sensitive receptors associated with exposure to diesel particulate matter ("DPM") emissions during Project construction would be 3.24 in one million, which would not exceed the SCAQMD significance threshold of 10 in one million (p. 3, Table ES-1).

TABLE ES-1: SUMMARY OF CONSTRUCTION CANCER AND NON-CANCER RISKS

Time Period	Location	Maximum Lifetime Cancer Risk (Risk per Million)	Significance Threshold (Risk per Million)	Exceeds Significance Threshold
2 Year Exposure	Maximum Exposed Sensitive Receptor	3.24	10	NO
Time Period	**Location**	**Maximum Hazard Index**	**Significance Threshold**	**Exceeds Significance Threshold**
Annual Average	Maximum Exposed Sensitive Receptor	≤0.01	1.0	NO

Furthermore, the HRA Report estimates that the maximum incremental cancer risk posed to nearby, existing residential sensitive receptors associated with exposure to DPM emissions during operation would be 0.93 in one million, which would also not exceed the SCAQMD significance threshold of 10 in one million (p. 3, Table ES-2).

TABLE ES-2: SUMMARY OF OPERATIONAL CANCER AND NON-CANCER RISKS

Time Period	Location	Maximum Lifetime Cancer Risk (Risk per Million)	Significance Threshold (Risk per Million)	Exceeds Significance Threshold
30 Year Exposure	Maximum Exposed Sensitive Receptor	0.93	10	NO
25 Year Exposure	Maximum Exposed Worker Receptor	0.50	10	NO
9 Year Exposure	Maximum Exposed Individual School Child	0.03	10	NO
Time Period	**Location**	**Maximum Hazard Index**	**Significance Threshold**	**Exceeds Significance Threshold**
Annual Average	Maximum Exposed Sensitive Receptor	≤0.01	1.0	NO
Annual Average	Maximum Exposed Worker Receptor	≤0.01	1.0	NO
Annual Average	Maximum Exposed Individual School Child	≤0.01	1.0	NO

However, the HRA Report's evaluation of the Project's potential health risk impacts, as well as the subsequent less-than-significant impact conclusion, is incorrect for three reasons.

First, the Staff Report's construction HRA is incorrect, as it relies upon emissions estimates from a flawed air model, as discussed above. Specifically, the HRA Report states:

> "The emissions calculations for the construction HRA component are based on an assumed mix of construction equipment and hauling activity as presented in the Cherry Avenue Warehouse Air Quality Impact Analysis ("technical study") prepared by Urban Crossroads, Inc. (4)" (p. 10).

As previously discussed, when we reviewed the Project's CalEEMod output files, provided in the AQIA within Attachment E to the Staff Report, we found that several of the values inputted into the model are not consistent with information disclosed in the Staff Report. As a result, the HRA utilizes an underestimated DPM concentration to calculate the health risk associated with Project construction. As such, the HRA Report's construction cancer risk should not be relied upon to determine Project significance.

Second, the construction and operational HRAs utilize incorrect Fraction of Time At Home ("FAH") values. Specifically, the HRAs utilize a FAH value of 0.85 for the third trimester (age -0.25 to 0) and infant (age 0 to 2) receptors, and an FAH value of 0.72 for the child receptors (age 2 to 16) (see excerpt below) (p. 19, Table 2-6; p. 20, Table 2-7).

TABLE 2-6: EXPOSURE ASSUMPTIONS FOR INDIVIDUAL CANCER RISK (CONSTRUCTION ACTIVITY)

Age	Daily Breathing Rate (L/kg-day)	Age Specific Factor	Exposure Duration (years)	Fraction of Time at Home	Exposure Frequency (days/year)	Exposure Time (hours/day)
0 to 2	1,090	10	1.00	0.85	261	8

TABLE 2-7: EXPOSURE ASSUMPTIONS FOR INDIVIDUAL CANCER RISK (30 YEAR RESIDENTIAL)

Age	Daily Breathing Rate (L/kg-day)	Age Specific Factor	Exposure Duration (years)	Fraction of Time at Home	Exposure Frequency (days/year)	Exposure Time (hours/day)
-0.25 to 0	361	10	0.25	0.85	350	24
0 to 2	1,090	10	2	0.85	350	24
2 to 16	572	3	14	0.72	350	24
16 to 30	261	1	14	0.73	350	24

However, the FAH values used for the third trimester, infant, and childhood receptors are incorrect, as SCAQMD guidance clearly states:

> "For Tiers 1, 2, and 3 screening purposes, the FAH is assumed to be 1 for ages third trimester to 16. As a default, children are assumed to attend a daycare or school in close proximity to their home and no discount should be taken for time spent outside of the area affected by the facility's emissions. People older than age 16 are assumed to spend only 73 percent of their time at home."[20]

Per SCAQMD guidance, the HRA Report should have used an FAH of 1 for the third trimester, infant, and child receptors. Thus, by utilizing incorrect FAH values, the HRA Report underestimates the cancer risk posed to nearby, existing sensitive receptors as a result of Project construction and operation.

Third, while the HRA Report includes two HRAs evaluating the health risk impacts to nearby, existing receptors as a result of Project construction and operation, the HRA Report fails to evaluate the combined lifetime cancer risk to nearby receptors as a result of Project construction and operation together. According to OEHHA guidance, "the excess cancer risk is calculated separately for each age grouping and then summed to yield cancer risk at the receptor location." [21] However, the HRA Report fails to sum the total cancer risks in order to evaluate the combined cancer risk over the course of the Project's total construction and operation. This is incorrect and, as such, an updated analysis should quantify and sum the Project's construction and operational cancer risks to compare to the SCAQMD threshold of 10 in one million.

Disproportionate Health Risk Impacts of Warehouses on Surrounding Communities

Upon review of the Staff Report and associated documents, we have determined that the development of the proposed Project would result in disproportionate health risk impacts on community members living, working, and going to school within the immediate area of the Project site. According to SCAQMD:

> "Those living within a half mile of warehouses are more likely to include communities of color, have health impacts such as higher rates of asthma and heart attacks, and a greater environmental burden."[22]

In particular, the SCAQMD found that more than 2.4 million people live within a half mile radius of at least one warehouse, and that those areas not only experience increased rates of asthma and heart attacks, but are also disproportionately Black and Latino communities below the poverty line.[23] Another study similarly indicates that "neighborhoods with lower household income levels and higher percentages of minorities are expected to have higher probabilities of containing warehousing

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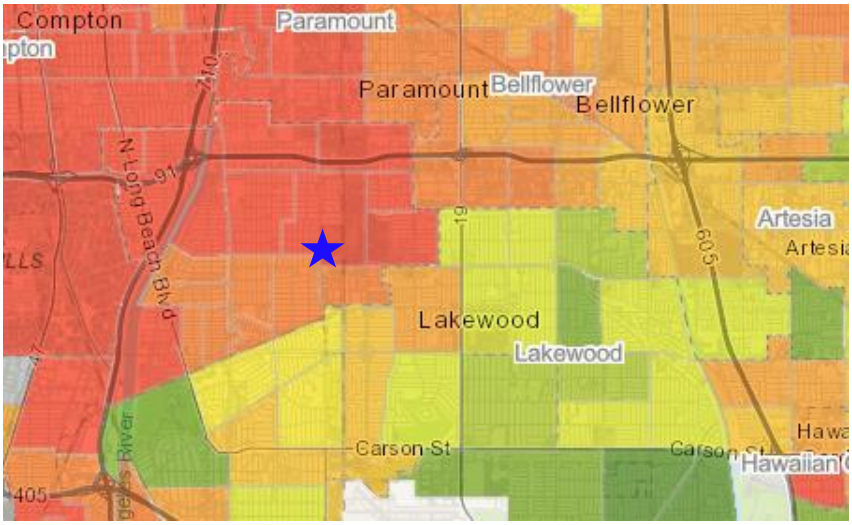
[20] "Risk Assessment Procedures." SCAQMD, August 2017, available at: http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1401/riskassessmentprocedures_2017_080717.pdf, p. 7.
[21] "Guidance Manual for preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf p. 8-4.
[22] "South Coast AQMD Governing Board Adopts Warehouse Indirect Source Rule." SCAQMD, May 2021, *available at:* http://www.aqmd.gov/docs/default-source/news-archive/2021/board-adopts-waisr-may7-2021.pdf?sfvrsn=9.
[23] "Southern California warehouse boom a huge source of pollution. Regulators are fighting back." Los Angeles Times, May 2021, *available at:* https://www.latimes.com/california/story/2021-05-05/air-quality-officials-target-warehouses-bid-to-curb-health-damaging-truck-pollution.

facilities."[24] Additionally, a report authored by the Inland Empire-based People's Collective for Environmental Justice and University of Redlands states:

> "As the warehouse and logistics industry continues to grow and net exponential profits at record rates, more warehouse projects are being approved and constructed in low-income communities of color and serving as a massive source of pollution by attracting thousands of polluting truck trips daily. Diesel trucks emit dangerous levels of nitrogen oxide and particulate matter that cause devastating health impacts including asthma, chronic obstructive pulmonary disease (COPD), cancer, and premature death. As a result, physicians consider these pollution-burdened areas 'diesel death zones.'"[25]

It is evident that the continued development of industrial warehouses within these communities poses a significant environmental justice challenge. However, the acceleration of warehouse development is only increasing despite the consequences on public health.

Long Beach, the setting of the proposed Project, has long borne a disproportionately high pollution burden compared to the rest of California. When using CalEnviroScreen 4.0, CalEPA's screening tool that ranks each census tract in the State for pollution and socioeconomic vulnerability, we found that the Project's census tract is in the 99th percentile of most polluted census tracts in the State (see excerpt below).[26]



[24] "Location of warehouses and environmental justice: Evidence from four metros in California." Metro Freight Center of Excellence, January 2018, *available at:* https://www.metrans.org/assets/research/MF%201.1g_Location%20of%20warehouses%20and%20environmental%20justice_Final%20Report_021618.pdf, p. 21.

[25] "Warehouses, Pollution, and Social Disparities: An analytical view of the logistics industry's impacts on environmental justice communities across Southern California." People's Collective for Environmental Justice, April 2021, *available at:* https://earthjustice.org/sites/default/files/files/warehouse_research_report_4.15.2021.pdf, p. 4.

[26] "CalEnviroScreen 4.0." California Office of Environmental Health Hazard Assessment (OEHHA), October 2021, *available at:* https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40.

Furthermore, the Data Visualization Tool for Mates V, a monitoring and evaluation study conducted by SCAQMD, demonstrates that the City already exhibits a heightened residential carcinogenic risk from exposure to air toxics. Specifically, the location of the Project site is in the 83rd percentile of highest cancer risks in the South Coast Air Basin, with a cancer risk of 508 in one million (see excerpt below).[27]



Therefore, development of the proposed warehouse would disproportionately contribute to and exacerbate the health conditions of the residents in Long Beach.

In April 2022, the American Lung Association ranked Los Angeles County as the third worst for ozone pollution in the nation.[28] This year, the County continues to face the worst ozone pollution, as it has seen the highest recorded Air Quality Index ("AQI") values for ground-level ozone in California.[29] The U.S. Environmental Protection Agency ("EPA") indicates that ozone, the main ingredient in "smog," can cause several health problems, which includes aggravating lung diseases and increasing the frequency of asthma attacks. The U.S. EPA states:

> "Children are at greatest risk from exposure to ozone because their lungs are still developing and they are more likely to be active outdoors when ozone levels are high, which increases their exposure. Children are also more likely than adults to have asthma."[30]

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[27] "Residential Air Toxics Cancer Risk Calculated from Model Data in Grid Cells." MATES V, 2018, *available at:* https://experience.arcgis.com/experience/79d3b6304912414bb21ebdde80100b23/page/Main-Page/?views=Click-tabs-for-other-data%2CGridded-Cancer-Risk; see also: "MATES V Multiple Air Toxics Exposure Study." SCAQMD, *available at:* http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v.
[28] "State of the Air 2022." American Lung Association, April 2022, *available at:* https://www.lung.org/research/sota/key-findings/most-polluted-places.
[29] "High Ozone Days." American Lung Association, 2022, *available at:* https://www.lung.org/research/sota/city-rankings/states/california.
[30] "Health Effects of Ozone Pollution." U.S. EPA, May 2021, *available at:* https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution.

Furthermore, regarding the increased sensitivity of early-life exposures to inhaled pollutants, the California Air Resources Board ("CARB") states:

> "Children are often at greater risk from inhaled pollutants, due to the following reasons:
>
> - Children have unique activity patterns and behavior. For example, they crawl and play on the ground, amidst dirt and dust that may carry a wide variety of toxicants. They often put their hands, toys, and other items into their mouths, ingesting harmful substances. Compared to adults, children typically spend more time outdoors and are more physically active. Time outdoors coupled with faster breathing during exercise increases children's relative exposure to air pollution.
>
> - Children are physiologically unique. Relative to body size, children eat, breathe, and drink more than adults, and their natural biological defenses are less developed. The protective barrier surrounding the brain is not fully developed, and children's nasal passages aren't as effective at filtering out pollutants. Developing lungs, immune, and metabolic systems are also at risk.
>
> - Children are particularly susceptible during development. Environmental exposures during fetal development, the first few years of life, and puberty have the greatest potential to influence later growth and development."[31]

A Stanford-led study also reveals that children exposed to high levels of air pollution are more susceptible to respiratory and cardiovascular diseases in adulthood.[32] Thus, given children's higher propensity to succumb to the negative health impacts of air pollutants, and as warehouses release more smog-forming pollution than any other sector, it is necessary to evaluate the specific health risk that warehouses pose to children in the nearby community.

According to the above-mentioned study by the People's Collective for Environmental Justice and University of Redlands, there are 640 schools in the South Coast Air Basin that are located within half a mile of a large warehouse, most of them in socio-economically disadvantaged areas.[33] Regarding the proposed Project itself, the Staff Report states:

> "Location R6 represents Harte Elementary School at 1671 E. Phillips Street, approximately 1,002 feet southwest of the Project site. Receptor R6 is placed at the building façade" (p. 51).

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[31] "Children and Air Pollution." California Air Resources Board (CARB), *available at:* https://ww2.arb.ca.gov/resources/documents/children-and-air-pollution.

[32] "Air pollution puts children at higher risk of disease in adulthood, according to Stanford researchers and others." Stanford, February 2021, *available at:* https://news.stanford.edu/2021/02/22/air-pollution-impacts-childrens-health/.

[33] "Warehouses, Pollution, and Social Disparities: An analytical view of the logistics industry's impacts on environmental justice communities across Southern California." People's Collective for Environmental Justice, April 2021, *available at:* https://earthjustice.org/sites/default/files/files/warehouse_research_report_4.15.2021.pdf, p. 4.

As discussed, Harte Elementary School is located approximately 1,002 feet, or 0.19 miles from the Project site. Therefore, this Project poses a significant threat because, as outlined above, children are a vulnerable population that are more susceptible to the damaging side effects of air pollution. As such, the Project would have detrimental short-term and long-term health impacts on local children if approved.

A full CEQA analysis should be prepared to evaluate the disproportionate impacts of the proposed warehouse on the community adjacent to the Project, including an analysis of the impact on children and people of color who live and attend school in the surrounding area. Finally, in order to evaluate the cumulative air quality impact from the several warehouse projects proposed or built in a one-mile radius of the Project site, the full CEQA analysis should prepare a cumulative health risk assessment ("HRA") to quantify the adverse health outcome from the effects of exposure to multiple warehouses in the immediate area in conjunction with the poor ambient air quality in the Project's census tract.

Greenhouse Gas

Failure to Adequately Evaluate Greenhouse Gas Impacts

The GHG Analysis estimates that the Project would generate net annual greenhouse gas ("GHG") emissions of 1,666.60 metric tons of carbon dioxide equivalents per year during construction and operation ("MT CO_2e/year") (p. 56, Table 3-8).

TABLE 3-8: PROJECT SCENARIO GHG EMISSIONS

Emission Source	Emissions (MT/yr)			
	CO_2	CH_4	N_2O	Total CO_2e
Annual construction-related emissions amortized over 30 years	33.03	5.63E-03	8.51E-04	33.42
Area Source	0.03	8.00E-05	0.00	0.03
Energy Source	328.17	0.03	3.48E-03	329.87
Mobile Source	1,311.37	0.06	0.14	1,354.26
TRU Source				241.74
On-Site Equipment	50.56	0.02	0.00	50.97
Solid Waste Management	58.00	3.43	0.00	143.70
Water Supply, Treatment, and Distribution	184.63	2.30	0.06	258.85
Total Project CO_2e (All Sources)		**2,412.86**		
Existing		*746.25*		
Total Net CO_2e (All Sources)		**1,666.60**		

Source: CalEEMod output, See Appendices 3.1 and 3.4 for detailed model outputs.

As such, the GHG Analysis concludes:

> "The Project would result in approximately 1,666.60 MT CO_2e/yr. As such, the Projects would not exceed the SCAQMD's numeric threshold of 3,000 MT CO_2e/yr if it were applied. Thus, the

Projects would not have the potential to result in a cumulatively considerable impact with respect to GHG emissions" (p. 57).

As discussed above, the GHG Analysis states that because emissions are not projected to exceed the threshold of 3,000 MT CO_2e/yr, the Project will result in a less-than-significant GHG impact. Furthermore, the GHG Analysis relies upon the Project's consistency with the CARB's 2017 *Scoping Plan* to conclude that the Project would result in a less-than-significant GHG impact (p. 58 – 63). However, the GHG Analysis's quantitative analysis, as well as the subsequent less-than-significant impact conclusion, is incorrect for three reasons.

(1) The GHG Analysis's quantitative analysis relies upon a flawed air model;
(2) The GHG Analysis's quantitative analysis relies upon an outdated threshold;
(3) The AQIA's unsubstantiated air model indicates a potentially significant impact; and
(4) The GHG Analysis fails to consider performance-based standards under CARB's 2017 scoping plan.

1) Incorrect and Unsubstantiated Quantitative Analysis of Emissions

As previously stated, the GHG Analysis estimates that the Project would generate net annual GHG emissions of 1,666.60 MT CO_2e/year (p. 56, Table 3-8). However, the GHG Analysis's quantitative analysis is unsubstantiated. As previously discussed, when reviewing the Project's CalEEMod models, provided in the AQIA and the GHG Analysis within Attachment E to the Staff Report, we found that several of the values inputted into the models are not consistent with information disclosed in the Staff Report. As a result, the models may underestimate the Project's emissions, and the GHG Analysis's quantitative analysis should not be relied upon to determine Project significance. A full CEQA analysis should be prepared that adequately assesses the potential GHG impacts that construction and operation of the proposed Project may have on the environment.

2) Incorrect Reliance on an Outdated Quantitative GHG Threshold

As previously stated, the GHG Analysis estimates that the Project would generate net annual GHG emissions of 1,666.60 MT CO_2e/year, which would not exceed the SCAQMD threshold of 3,000 MT CO_2e/year (p. 56, Table 3-8). However, the guidance that provided the 3,000 MT CO_2e/year threshold, the SCAQMD's 2008 *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules, and Plans* report, was developed when the Global Warming Solutions Act of 2006, commonly known as "AB 32", was the governing statute for GHG reductions in California. AB 32 requires California to reduce GHG emissions to 1990 levels by 2020.[34] Furthermore, AEP guidance states:

[34] "Health & Safety Code 38550." California State Legislature, January 2007, *available at:* https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC&sectionNum=38550.

> "[F]or evaluating projects with a post 2020 horizon, the threshold will need to be revised based on a new gap analysis that would examine 17 development and reduction potentials out to the next GHG reduction milestone."[35]

As it is currently February 2023, thresholds for 2020 are not applicable to the proposed Project and should be revised to reflect the current GHG reduction target. As such, the SCAQMD bright-line threshold of 3,000 MT CO_2e/year is outdated and inapplicable to the proposed Project, and the Staff Report's less-than-significant GHG impact conclusion should not be relied upon. Instead, we recommend that the Project apply the SCAQMD 2035 service population efficiency target of 3.0 MT CO_2e/SP/year, which was calculated by applying a 40% reduction to the 2020 targets.[36]

3) Failure to Identify a Potentially Significant GHG Impact

In an effort to quantitatively evaluate the Project's GHG emissions, we compared the Project's GHG emissions, as estimated by the GHG Analysis, to the SCAQMD 2035 efficiency target of 3.0 MT CO_2e/SP/year. When applying this threshold, the Project's incorrect and unsubstantiated air model indicates a potentially significant GHG impact.

As previously stated, the GHG Analysis estimates that the Project would generate net annual GHG emissions of 1,666.60 MT CO_2e/year (p. 56, Table 3-8). According to CAPCOA's *CEQA & Climate Change* report, a service population ("SP") is defined as "the sum of the number of residents and the number of jobs supported by the project."[37] According to the *Employment Density Study Summary Report* completed by the Southern California Association of Governments ("SCAG"), the project would support approximately 200 employees.[38, 39] As the project is not expected to support any residential land uses, we estimate an SP of 200 people. When dividing the Project's net annual GHG emissions, as estimated by the GHG Analysis, by an SP of 200 people, we find that the Project would emit approximately 8.3 MT CO_2e/SP/year (see table below).[40]

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[35] "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at:* https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 39.

[36] "Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #15." SCAQMD, September 2010, *available at:* http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf, p. 2.

[37] "CEQA & Climate Change." California Air Pollution Control Officers Association (CAPCOA), January 2008, *available at:* http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA-White-Paper.pdf, p. 71-72.

[38] Calculated: (303,972-SF warehouse) / (1,518-SF average per one warehouse employee in Los Angeles County) = 200.2 employees.

[39] "Employment Density Study Summary Report." Southern California Association of Governments (SCAG), October 2001, *available at:* https://docplayer.net/30300085-Employment-density-study-summary-report-october-31-prepared-for-southern-california-association-of-governments.html, p. 4.

[40] Calculated: (1,666.60 MT CO_2e/year) / (200 service population) = (8.3 MT CO_2e/SP/year).

Project Greenhouse Gas Emissions	
Annual Emissions (MT CO_2e/year)	1,666.60
Service Population	200
Service Population Efficiency (MT CO_2e/SP/year)	8.3
SCAQMD 2035 Target	**3.0**
Exceeds?	***Yes***

As demonstrated above, the Project's service population efficiency value exceeds the SCAQMD 2035 efficiency target of 3.0 MT CO_2e/SP/year, indicating a potentially significant impact not previously identified or addressed by the GHG Analysis. As a result, the GHG Analysis's less-than-significant GHG impact conclusion should not be relied upon. A full CEQA analysis should be prepared, including an updated GHG analysis and incorporating additional mitigation measures to reduce the Project's GHG emissions to less-than-significant levels.

4) Failure to Consider Performance-based Standards Under CARB's 2017 Scoping Plan

As previously discussed, the GHG Analysis concludes that the Project would be consistent with CARB's 2017 Climate Change Scoping Plan (p. 58 - 63). However, this is incorrect, as the GHG Analysis fails to consider the performance-based measures proposed by CARB.

i. Passenger & Light Duty VMT Per Capita Benchmarks per SB 375

In reaching the State's long-term GHG emission reduction goals, CARB's 2017 *Scoping Plan* explicitly cites to SB 375 and the VMT reductions anticipated under the implementation of Sustainable Community Strategies.[41] CARB has identified the population and daily VMT from passenger autos and light-duty vehicles at the state and county level for each year between 2010 to 2050 under a "baseline scenario" that includes "current projections of VMT included in the existing Regional Transportation Plans/Sustainable Communities Strategies (RTP/SCSs) adopted by the State's 18 Metropolitan Planning Organizations (MPOs) pursuant to SB 375 as of 2015."[42] By dividing the projected daily VMT by the population, we calculated the daily VMT per capita for each year at the state and county level for 2010 (baseline year), 2024 (Project operational year), and 2030 (target years under SB 32) (see table below).

[41] "California's 2017 Climate Change Scoping Plan." CARB, November 2017, *available at*: https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf, p. 25, 98, 101-103.
[42] "Supporting Calculations for 2017 Scoping Plan-Identified VMT Reductions," California Air Resources Board (CARB), January 2019, *available at*: https://ww2.arb.ca.gov/resources/documents/carb-2017-scoping-plan-identified-vmt-reductions-and-relationship-state-climate; *see also:* https://ww2.arb.ca.gov/sites/default/files/2019-01/sp_mss_vmt_calculations_jan19_0.xlsx.

2017 Scoping Plan Daily VMT Per Capita						
	Los Angeles County			State		
Year	Population	LDV VMT Baseline	VMT Per Capita	Population	LDV VMT Baseline	VMT Per Capita
2010	9,838,771	216,979,222	22.05	37,335,085	836,463,980.46	22.40
2024	10,627,846	219,237,757	22.62	41,994,283	926,776,780.89	22.07
2030	10,868,614	215,539,586	19.83	43,939,250	957,178,153.19	21.78

As the Staff Report fails to evaluate the Project's consistency with the performance-based daily VMT per capita projections from CARB's 2017 *Scoping Plan*, the Staff Report's claim that the proposed Project would be consistent with the *Scoping Plan* is unsupported.

Furthermore, as of November 16, 2022, CARB has released an updated scoping plan for achieving carbon neutrality. However, the GHG Analysis fails to discuss the updated CARB 2022 Scoping plan whatsoever. A full CEQA analysis should be prepared for the proposed Project to provide additional information and analysis to conclude less-than-significant GHG impacts.

Mitigation

Feasible Mitigation Measures Available to Reduce Emissions

Our analysis demonstrates that the Project would result in potentially significant air quality and GHG impacts that should be mitigated further. As such, in an effort to reduce the Project's emissions, we identified several mitigation measures that are applicable to the proposed Project. Feasible mitigation measures can be found in the California Department of Justice Warehouse Project Best Practices document.[43] Therefore, to reduce the Project's emissions, consideration of the following measures should be made:

- Requiring off-road construction equipment to be hybrid electric-diesel or zero emission, where available, and all diesel-fueled off-road construction equipment to be equipped with CARB Tier IV-compliant engines or better, and including this requirement in applicable bid documents, purchase orders, and contracts, with successful contractors demonstrating the ability to supply the compliant construction equipment for use prior to any ground-disturbing and construction activities.
- Prohibiting off-road diesel-powered equipment from being in the "on" position for more than 10 hours per day.
- Using electric-powered hand tools, forklifts, and pressure washers, and providing electrical hook ups to the power grid rather than use of diesel-fueled generators to supply their power.
- Designating an area in the construction site where electric-powered construction vehicles and equipment can charge.
- Limiting the amount of daily grading disturbance area.

[43] "Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act." State of California Department of Justice, September 2022, *available at*: https://oag.ca.gov/system/files/media/warehouse-best-practices.pdf, p. 8 – 10.

- Prohibiting grading on days with an Air Quality Index forecast of greater than 100 for particulates or ozone for the project area.
- Forbidding idling of heavy equipment for more than three minutes.
- Keeping onsite and furnishing to the lead agency or other regulators upon request, all equipment maintenance records and data sheets, including design specifications and emission control tier classifications.
- Conducting an on-site inspection to verify compliance with construction mitigation and to identify other opportunities to further reduce construction impacts.
- Using paints, architectural coatings, and industrial maintenance coatings that have volatile organic compound levels of less than 10 g/L.
- Providing information on transit and ridesharing programs and services to construction employees.
- Providing meal options onsite or shuttles between the facility and nearby meal destinations for construction employees.
- Requiring all heavy-duty vehicles engaged in drayage to or from the project site to be zero-emission beginning in 2030.
- Requiring all on-site motorized operational equipment, such as forklifts and yard trucks, to be zero-emission with the necessary charging or fueling stations provided.
- Requiring tenants to use zero-emission light- and medium-duty vehicles as part of business operations.
- Forbidding trucks from idling for more than three minutes and requiring operators to turn off engines when not in use.
- Posting both interior- and exterior-facing signs, including signs directed at all dock and delivery areas, identifying idling restrictions and contact information to report violations to CARB, the local air district, and the building manager.
- Installing solar photovoltaic systems on the project site of a specified electrical generation capacity that is equal to or greater than the building's projected energy needs, including all electrical chargers.
- Designing all project building roofs to accommodate the maximum future coverage of solar panels and installing the maximum solar power generation capacity feasible.
- Constructing zero-emission truck charging/fueling stations proportional to the number of dock doors at the project.
- Running conduit to designated locations for future electric truck charging stations.
- Unless the owner of the facility records a covenant on the title of the underlying property ensuring that the property cannot be used to provide refrigerated warehouse space, constructing electric plugs for electric transport refrigeration units at every dock door and requiring truck operators with transport refrigeration units to use the electric plugs when at loading docks.
- Oversizing electrical rooms by 25 percent or providing a secondary electrical room to accommodate future expansion of electric vehicle charging capability.

- Constructing and maintaining electric light-duty vehicle charging stations proportional to the number of employee parking spaces (for example, requiring at least 10% of all employee parking spaces to be equipped with electric vehicle charging stations of at least Level 2 charging performance)
- Running conduit to an additional proportion of employee parking spaces for a future increase in the number of electric light-duty charging stations.
- Installing and maintaining, at the manufacturer's recommended maintenance intervals, air filtration systems at sensitive receptors within a certain radius of facility for the life of the project.
- Installing and maintaining, at the manufacturer's recommended maintenance intervals, an air monitoring station proximate to sensitive receptors and the facility for the life of the project, and making the resulting data publicly available in real time. While air monitoring does not mitigate the air quality or greenhouse gas impacts of a facility, it nonetheless benefits the affected community by providing information that can be used to improve air quality or avoid exposure to unhealthy air.
- Requiring all stand-by emergency generators to be powered by a non-diesel fuel.
- Requiring facility operators to train managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks.
- Requiring operators to establish and promote a rideshare program that discourages single-occupancy vehicle trips and provides financial incentives for alternate modes of transportation, including carpooling, public transit, and biking.
- Meeting CalGreen Tier 2 green building standards, including all provisions related to designated parking for clean air vehicles, electric vehicle charging, and bicycle parking.
- Designing to LEED green building certification standards.
- Providing meal options onsite or shuttles between the facility and nearby meal destinations.
- Posting signs at every truck exit driveway providing directional information to the truck route.
- Improving and maintaining vegetation and tree canopy for residents in and around the project area.
- Requiring that every tenant train its staff in charge of keeping vehicle records in diesel technologies and compliance with CARB regulations, by attending CARB-approved courses. Also require facility operators to maintain records on-site demonstrating compliance and make records available for inspection by the local jurisdiction, air district, and state upon request.
- Requiring tenants to enroll in the United States Environmental Protection Agency's SmartWay program, and requiring tenants who own, operate, or hire trucking carriers with more than 100 trucks to use carriers that are SmartWay carriers.
- Providing tenants with information on incentive programs, such as the Carl Moyer Program and Voucher Incentive Program, to upgrade their fleets.

These measures offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed Project, which subsequently, reduce emissions released during Project construction and operation.

Furthermore, as it is policy of the State that eligible renewable energy resources and zero-carbon resources supply 100% of retail sales of electricity to California end-use customers by December 31, 2045, we emphasize the applicability of incorporating solar power system into the Project design. Until the feasibility of incorporating on-site renewable energy production is considered, the Project should not be approved.

A full CEQA analysis should be prepared to include all feasible mitigation measures, as well as include updated air quality and GHG analyses to ensure that the necessary mitigation measures are implemented to reduce emissions to below thresholds. The analysis should also demonstrate a commitment to the implementation of these measures prior to Project approval, to ensure that the Project's significant emissions are reduced to the maximum extent possible.

Disclaimer

SWAPE has received limited discovery regarding this project. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,



Matt Hagemann, P.G., C.Hg.



Paul E. Rosenfeld, Ph.D.

Attachment A: Proportionally Altered Construction Schedule
Attachment B: Updated CalEEMod Output Files
Attachment C: Matt Hagemann CV
Attachment D: Paul Rosenfeld CV

Construction Schedule Calculations					
Phase	Default Phase Length	Construction Duration	%	Construction Duration	Revised Phase Length
Demolition	20	558	0.0358	363	13
Site Preparation	10	558	0.0179	363	7
Grading	30	558	0.0538	363	20
Construction	300	558	0.5376	363	195
Paving	20	558	0.0358	363	13
Architectural Coating	20	558	0.0358	363	13

	Total Default Construction Duration	Revised Construction Duration
Start Date	1/15/2023	1/15/2023
End Date	7/26/2024	1/13/2024
Total Days	558	363

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Cherry Avenue Warehouse (Construction - Unmitigated)

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	45.60	1000sqft	1.05	45,596.00	0
Unrefrigerated Warehouse-No Rail	258.38	1000sqft	5.93	258,376.00	0
Other Asphalt Surfaces	261.15	1000sqft	6.00	261,149.00	0
Parking Lot	559.00	Space	5.03	223,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with the Staff Report's model.

Land Use - See SWAPE's comments on "Underestimated Parking Land Use Size"

Construction Phase - See SWAPE's comments on "Unsubstantiated Changes to Individual Construction Phase Lengths"

Off-road Equipment - Consistent with the Staff Report's model.

Off-road Equipment - Consistent with the Staff Report's model.

Off-road Equipment - Consistent with the Staff Report's model.

Off-road Equipment - Consistent with the Staff Report's model.

Off-road Equipment - Consistent with the Staff Report's model.

Off-road Equipment - Consistent with the Staff Report's model.

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Trips and VMT - See SWAPE's comments on "Failure to Model All Required Demolition"

Demolition - See SWAPE's comments on "Failure to Model All Required Demolition"

Grading - Consistent with the Staff Report's model.

Architectural Coating - See SWAPE's comments on "Unsubstantiated Reductions to Architectural Coating Emission Factors"

Vehicle Trips - Consistent with the Staff Report's model.

Energy Use - Consitent with the Staff Report's model.

Water And Wastewater - Consistent with the Staff Report's model.

Solid Waste - Consistent with the Staff Report's model.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	13.00
tblConstructionPhase	NumDays	300.00	195.00
tblConstructionPhase	NumDays	20.00	13.00
tblConstructionPhase	NumDays	30.00	20.00
tblConstructionPhase	NumDays	20.00	13.00
tblConstructionPhase	NumDays	10.00	7.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	2.73	0.00
tblEnergyUse	LightingElect	1.91	0.00
tblEnergyUse	NT24E	13.61	0.00
tblEnergyUse	NT24E	1.34	0.00
tblEnergyUse	NT24NG	0.09	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	0.37	0.00
tblEnergyUse	T24E	0.58	0.00
tblEnergyUse	T24NG	0.93	0.00
tblEnergyUse	T24NG	0.83	0.00
tblLandUse	LandUseSquareFeet	45,600.00	45,596.00
tblLandUse	LandUseSquareFeet	258,380.00	258,376.00

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tblLandUse	LandUseSquareFeet	261,150.00	261,149.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSolidWaste	SolidWasteGenerationRate	42.86	0.00
tblSolidWaste	SolidWasteGenerationRate	242.88	0.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	14.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	2.12	0.00
tblVehicleTrips	ST_TR	1.74	0.00
tblVehicleTrips	SU_TR	2.12	0.00
tblVehicleTrips	SU_TR	1.74	0.00
tblVehicleTrips	WD_TR	2.12	0.00
tblVehicleTrips	WD_TR	1.74	0.00
tblWater	IndoorWaterUseRate	10,545,000.00	0.00
tblWater	IndoorWaterUseRate	59,750,375.00	0.00

2.0 Emissions Summary

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.7328	4.1921	4.9241	0.0124	0.8106	0.1686	0.9792	0.2239	0.1583	0.3822	0.0000	1,120.3352	1,120.3352	0.1556	0.0490	1,138.8120
2024	1.2516	9.7500e-003	0.0248	6.0000e-005	3.9800e-003	4.7000e-004	4.4500e-003	1.0600e-003	4.7000e-004	1.5200e-003	0.0000	4.9491	4.9491	1.8000e-004	8.0000e-005	4.9765
Maximum	**1.2516**	**4.1921**	**4.9241**	**0.0124**	**0.8106**	**0.1686**	**0.9792**	**0.2239**	**0.1583**	**0.3822**	**0.0000**	**1,120.3352**	**1,120.3352**	**0.1556**	**0.0490**	**1,138.8120**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.7328	4.1921	4.9241	0.0124	0.8106	0.1686	0.9792	0.2239	0.1583	0.3822	0.0000	1,120.3346	1,120.3346	0.1556	0.0490	1,138.8113
2024	1.2516	9.7500e-003	0.0248	6.0000e-005	3.9800e-003	4.7000e-004	4.4500e-003	1.0600e-003	4.7000e-004	1.5200e-003	0.0000	4.9491	4.9491	1.8000e-004	8.0000e-005	4.9765
Maximum	**1.2516**	**4.1921**	**4.9241**	**0.0124**	**0.8106**	**0.1686**	**0.9792**	**0.2239**	**0.1583**	**0.3822**	**0.0000**	**1,120.3346**	**1,120.3346**	**0.1556**	**0.0490**	**1,138.8113**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-15-2023**	**4-14-2023**	1.2990	1.2990
2	**4-15-2023**	**7-14-2023**	1.2470	1.2470
3	**7-15-2023**	**10-14-2023**	1.2627	1.2627
4	**10-15-2023**	**1-14-2024**	2.3277	2.3277
5	**1-15-2024**	**4-14-2024**	0.0819	0.0819
		Highest	2.3277	2.3277

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2787	1.3000e-004	0.0143	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0279	0.0279	7.0000e-005	0.0000	0.0297
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.2787**	**1.3000e-004**	**0.0143**	**0.0000**	**0.0000**	**5.0000e-005**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.0279**	**0.0279**	**7.0000e-005**	**0.0000**	**0.0297**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2787	1.3000e-004	0.0143	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0279	0.0279	7.0000e-005	0.0000	0.0297
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.2787**	**1.3000e-004**	**0.0143**	**0.0000**	**0.0000**	**5.0000e-005**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.0279**	**0.0279**	**7.0000e-005**	**0.0000**	**0.0297**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition/Crushing	Demolition	1/15/2023	2/1/2023	5	13	
2	Site Preparation	Site Preparation	2/2/2023	2/10/2023	5	7	
3	Grading	Grading	2/11/2023	3/10/2023	5	20	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4	Building Construction	Building Construction	3/11/2023	12/8/2023	5	195	
5	Paving	Paving	12/9/2023	12/27/2023	5	13	
6	Architectural Coating	Architectural Coating	12/28/2023	1/15/2024	5	13	

Acres of Grading (Site Preparation Phase): 24.5

Acres of Grading (Grading Phase): 60

Acres of Paving: 11.03

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 455,958; Non-Residential Outdoor: 151,986; Striped Parking Area: 29,085 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition/Crushing	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition/Crushing	Crushing/Proc. Equipment	1	8.00	85	0.78
Demolition/Crushing	Excavators	3	8.00	158	0.38
Demolition/Crushing	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Crawler Tractors	4	8.00	212	0.43
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crawler Tractors	2	8.00	212	0.43
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	4.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Forklifts	5	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	5	8.00	97	0.37

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Building Construction	Welders	2	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	8.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition/Crushing	7	18.00	10.00	1,730.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	14.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	16	331.00	129.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	66.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition/Crushing - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1872	0.0000	0.1872	0.0284	0.0000	0.0284	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0177	0.1591	0.1558	3.0000e-004		7.4900e-003	7.4900e-003		7.0400e-003	7.0400e-003	0.0000	26.0134	26.0134	6.4200e-003	0.0000	26.1739
Total	**0.0177**	**0.1591**	**0.1558**	**3.0000e-004**	**0.1872**	**7.4900e-003**	**0.1947**	**0.0284**	**7.0400e-003**	**0.0354**	**0.0000**	**26.0134**	**26.0134**	**6.4200e-003**	**0.0000**	**26.1739**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.8200e-003	0.1189	0.0303	5.1000e-004	0.0149	7.1000e-004	0.0156	4.0900e-003	6.8000e-004	4.7700e-003	0.0000	50.4528	50.4528	2.7800e-003	8.0100e-003	52.9098
Vendor	7.0000e-005	2.6200e-003	9.8000e-004	1.0000e-005	4.1000e-004	1.0000e-005	4.2000e-004	1.2000e-004	1.0000e-005	1.3000e-004	0.0000	1.1818	1.1818	4.0000e-005	1.7000e-004	1.2335
Worker	3.7000e-004	2.9000e-004	3.9900e-003	1.0000e-005	1.2800e-003	1.0000e-005	1.2900e-003	3.4000e-004	1.0000e-005	3.5000e-004	0.0000	1.0205	1.0205	3.0000e-005	3.0000e-005	1.0291
Total	**2.2600e-003**	**0.1219**	**0.0353**	**5.3000e-004**	**0.0166**	**7.3000e-004**	**0.0173**	**4.5500e-003**	**7.0000e-004**	**5.2500e-003**	**0.0000**	**52.6552**	**52.6552**	**2.8500e-003**	**8.2100e-003**	**55.1725**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition/Crushing - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1872	0.0000	0.1872	0.0284	0.0000	0.0284	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0177	0.1591	0.1558	3.0000e-004		7.4900e-003	7.4900e-003		7.0400e-003	7.0400e-003	0.0000	26.0134	26.0134	6.4200e-003	0.0000	26.1739
Total	**0.0177**	**0.1591**	**0.1558**	**3.0000e-004**	**0.1872**	**7.4900e-003**	**0.1947**	**0.0284**	**7.0400e-003**	**0.0354**	**0.0000**	**26.0134**	**26.0134**	**6.4200e-003**	**0.0000**	**26.1739**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.8200e-003	0.1189	0.0303	5.1000e-004	0.0149	7.1000e-004	0.0156	4.0900e-003	6.8000e-004	4.7700e-003	0.0000	50.4528	50.4528	2.7800e-003	8.0100e-003	52.9098
Vendor	7.0000e-005	2.6200e-003	9.8000e-004	1.0000e-005	4.1000e-004	1.0000e-005	4.2000e-004	1.2000e-004	1.0000e-005	1.3000e-004	0.0000	1.1818	1.1818	4.0000e-005	1.7000e-004	1.2335
Worker	3.7000e-004	2.9000e-004	3.9900e-003	1.0000e-005	1.2800e-003	1.0000e-005	1.2900e-003	3.4000e-004	1.0000e-005	3.5000e-004	0.0000	1.0205	1.0205	3.0000e-005	3.0000e-005	1.0291
Total	**2.2600e-003**	**0.1219**	**0.0353**	**5.3000e-004**	**0.0166**	**7.3000e-004**	**0.0173**	**4.5500e-003**	**7.0000e-004**	**5.2500e-003**	**0.0000**	**52.6552**	**52.6552**	**2.8500e-003**	**8.2100e-003**	**55.1725**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0762	0.0000	0.0762	0.0362	0.0000	0.0362	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0134	0.1466	0.0640	2.0000e-004		6.1500e-003	6.1500e-003		5.6600e-003	5.6600e-003	0.0000	17.5080	17.5080	5.6600e-003	0.0000	17.6496
Total	**0.0134**	**0.1466**	**0.0640**	**2.0000e-004**	**0.0762**	**6.1500e-003**	**0.0824**	**0.0362**	**5.6600e-003**	**0.0418**	**0.0000**	**17.5080**	**17.5080**	**5.6600e-003**	**0.0000**	**17.6496**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0000e-005	5.6000e-004	2.1000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	3.0000e-005	0.0000	3.0000e-005	0.0000	0.2546	0.2546	1.0000e-005	4.0000e-005	0.2657
Worker	2.0000e-004	1.6000e-004	2.1500e-003	1.0000e-005	6.9000e-004	0.0000	6.9000e-004	1.8000e-004	0.0000	1.9000e-004	0.0000	0.5495	0.5495	1.0000e-005	1.0000e-005	0.5541
Total	**2.2000e-004**	**7.2000e-004**	**2.3600e-003**	**1.0000e-005**	**7.8000e-004**	**0.0000**	**7.8000e-004**	**2.1000e-004**	**0.0000**	**2.2000e-004**	**0.0000**	**0.8041**	**0.8041**	**2.0000e-005**	**5.0000e-005**	**0.8198**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0762	0.0000	0.0762	0.0362	0.0000	0.0362	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0134	0.1466	0.0640	2.0000e-004		6.1500e-003	6.1500e-003		5.6600e-003	5.6600e-003	0.0000	17.5080	17.5080	5.6600e-003	0.0000	17.6496
Total	**0.0134**	**0.1466**	**0.0640**	**2.0000e-004**	**0.0762**	**6.1500e-003**	**0.0824**	**0.0362**	**5.6600e-003**	**0.0418**	**0.0000**	**17.5080**	**17.5080**	**5.6600e-003**	**0.0000**	**17.6496**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0000e-005	5.6000e-004	2.1000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	3.0000e-005	0.0000	3.0000e-005	0.0000	0.2546	0.2546	1.0000e-005	4.0000e-005	0.2657
Worker	2.0000e-004	1.6000e-004	2.1500e-003	1.0000e-005	6.9000e-004	0.0000	6.9000e-004	1.8000e-004	0.0000	1.9000e-004	0.0000	0.5495	0.5495	1.0000e-005	1.0000e-005	0.5541
Total	**2.2000e-004**	**7.2000e-004**	**2.3600e-003**	**1.0000e-005**	**7.8000e-004**	**0.0000**	**7.8000e-004**	**2.1000e-004**	**0.0000**	**2.2000e-004**	**0.0000**	**0.8041**	**0.8041**	**2.0000e-005**	**5.0000e-005**	**0.8198**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0920	0.0000	0.0920	0.0365	0.0000	0.0365	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0312	0.3341	0.2194	5.6000e-004		0.0135	0.0135		0.0124	0.0124	0.0000	49.4846	49.4846	0.0160	0.0000	49.8847
Total	**0.0312**	**0.3341**	**0.2194**	**5.6000e-004**	**0.0920**	**0.0135**	**0.1055**	**0.0365**	**0.0124**	**0.0489**	**0.0000**	**49.4846**	**49.4846**	**0.0160**	**0.0000**	**49.8847**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6000e-004	5.6400e-003	2.1100e-003	3.0000e-005	8.8000e-004	3.0000e-005	9.1000e-004	2.5000e-004	3.0000e-005	2.8000e-004	0.0000	2.5455	2.5455	9.0000e-005	3.7000e-004	2.6568
Worker	6.3000e-004	5.0000e-004	6.8100e-003	2.0000e-005	2.1900e-003	1.0000e-005	2.2100e-003	5.8000e-004	1.0000e-005	5.9000e-004	0.0000	1.7445	1.7445	5.0000e-005	5.0000e-005	1.7592
Total	**7.9000e-004**	**6.1400e-003**	**8.9200e-003**	**5.0000e-005**	**3.0700e-003**	**4.0000e-005**	**3.1200e-003**	**8.3000e-004**	**4.0000e-005**	**8.7000e-004**	**0.0000**	**4.2900**	**4.2900**	**1.4000e-004**	**4.2000e-004**	**4.4160**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0920	0.0000	0.0920	0.0365	0.0000	0.0365	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0312	0.3341	0.2194	5.6000e-004		0.0135	0.0135		0.0124	0.0124	0.0000	49.4845	49.4845	0.0160	0.0000	49.8846
Total	**0.0312**	**0.3341**	**0.2194**	**5.6000e-004**	**0.0920**	**0.0135**	**0.1055**	**0.0365**	**0.0124**	**0.0489**	**0.0000**	**49.4845**	**49.4845**	**0.0160**	**0.0000**	**49.8846**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6000e-004	5.6400e-003	2.1100e-003	3.0000e-005	8.8000e-004	3.0000e-005	9.1000e-004	2.5000e-004	3.0000e-005	2.8000e-004	0.0000	2.5455	2.5455	9.0000e-005	3.7000e-004	2.6568
Worker	6.3000e-004	5.0000e-004	6.8100e-003	2.0000e-005	2.1900e-003	1.0000e-005	2.2100e-003	5.8000e-004	1.0000e-005	5.9000e-004	0.0000	1.7445	1.7445	5.0000e-005	5.0000e-005	1.7592
Total	**7.9000e-004**	**6.1400e-003**	**8.9200e-003**	**5.0000e-005**	**3.0700e-003**	**4.0000e-005**	**3.1200e-003**	**8.3000e-004**	**4.0000e-005**	**8.7000e-004**	**0.0000**	**4.2900**	**4.2900**	**1.4000e-004**	**4.2000e-004**	**4.4160**

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3016	2.7671	3.0463	5.1700e-003		0.1327	0.1327		0.1250	0.1250	0.0000	444.6142	444.6142	0.1051	0.0000	447.2425
Total	**0.3016**	**2.7671**	**3.0463**	**5.1700e-003**		**0.1327**	**0.1327**		**0.1250**	**0.1250**	**0.0000**	**444.6142**	**444.6142**	**0.1051**	**0.0000**	**447.2425**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0142	0.5069	0.1897	2.3400e-003	0.0793	2.4300e-003	0.0817	0.0229	2.3300e-003	0.0252	0.0000	228.6869	228.6869	7.6400e-003	0.0329	238.6856
Worker	0.1024	0.0813	1.0996	3.0700e-003	0.3536	2.1700e-003	0.3558	0.0939	2.0000e-003	0.0959	0.0000	281.4949	281.4949	7.4900e-003	7.3300e-003	283.8656
Total	**0.1166**	**0.5882**	**1.2893**	**5.4100e-003**	**0.4329**	**4.6000e-003**	**0.4375**	**0.1168**	**4.3300e-003**	**0.1211**	**0.0000**	**510.1818**	**510.1818**	**0.0151**	**0.0402**	**522.5512**

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3016	2.7671	3.0463	5.1700e-003		0.1327	0.1327		0.1250	0.1250	0.0000	444.6136	444.6136	0.1051	0.0000	447.2420
Total	**0.3016**	**2.7671**	**3.0463**	**5.1700e-003**		**0.1327**	**0.1327**		**0.1250**	**0.1250**	**0.0000**	**444.6136**	**444.6136**	**0.1051**	**0.0000**	**447.2420**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0142	0.5069	0.1897	2.3400e-003	0.0793	2.4300e-003	0.0817	0.0229	2.3300e-003	0.0252	0.0000	228.6869	228.6869	7.6400e-003	0.0329	238.6856
Worker	0.1024	0.0813	1.0996	3.0700e-003	0.3536	2.1700e-003	0.3558	0.0939	2.0000e-003	0.0959	0.0000	281.4949	281.4949	7.4900e-003	7.3300e-003	283.8656
Total	**0.1166**	**0.5882**	**1.2893**	**5.4100e-003**	**0.4329**	**4.6000e-003**	**0.4375**	**0.1168**	**4.3300e-003**	**0.1211**	**0.0000**	**510.1818**	**510.1818**	**0.0151**	**0.0402**	**522.5512**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0145					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0212**	**0.0663**	**0.0948**	**1.5000e-004**		**3.3200e-003**	**3.3200e-003**		**3.0500e-003**	**3.0500e-003**	**0.0000**	**13.0175**	**13.0175**	**4.2100e-003**	**0.0000**	**13.1227**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.5000e-004	3.3200e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0700e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8504	0.8504	2.0000e-005	2.0000e-005	0.8576
Total	**3.1000e-004**	**2.5000e-004**	**3.3200e-003**	**1.0000e-005**	**1.0700e-003**	**1.0000e-005**	**1.0700e-003**	**2.8000e-004**	**1.0000e-005**	**2.9000e-004**	**0.0000**	**0.8504**	**0.8504**	**2.0000e-005**	**2.0000e-005**	**0.8576**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0145					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0212**	**0.0663**	**0.0948**	**1.5000e-004**		**3.3200e-003**	**3.3200e-003**		**3.0500e-003**	**3.0500e-003**	**0.0000**	**13.0175**	**13.0175**	**4.2100e-003**	**0.0000**	**13.1227**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.5000e-004	3.3200e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0700e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8504	0.8504	2.0000e-005	2.0000e-005	0.8576
Total	**3.1000e-004**	**2.5000e-004**	**3.3200e-003**	**1.0000e-005**	**1.0700e-003**	**1.0000e-005**	**1.0700e-003**	**2.8000e-004**	**1.0000e-005**	**2.9000e-004**	**0.0000**	**0.8504**	**0.8504**	**2.0000e-005**	**2.0000e-005**	**0.8576**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2271					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6000e-004	1.7400e-003	2.4100e-003	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.3404	0.3404	2.0000e-005	0.0000	0.3409
Total	**0.2274**	**1.7400e-003**	**2.4100e-003**	**0.0000**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.3404**	**0.3404**	**2.0000e-005**	**0.0000**	**0.3409**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.7000e-004	2.2500e-003	1.0000e-005	7.2000e-004	0.0000	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.5757	0.5757	2.0000e-005	1.0000e-005	0.5805
Total	**2.1000e-004**	**1.7000e-004**	**2.2500e-003**	**1.0000e-005**	**7.2000e-004**	**0.0000**	**7.3000e-004**	**1.9000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**0.5757**	**0.5757**	**2.0000e-005**	**1.0000e-005**	**0.5805**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2271					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6000e-004	1.7400e-003	2.4100e-003	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.3404	0.3404	2.0000e-005	0.0000	0.3409
Total	**0.2274**	**1.7400e-003**	**2.4100e-003**	**0.0000**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.3404**	**0.3404**	**2.0000e-005**	**0.0000**	**0.3409**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.7000e-004	2.2500e-003	1.0000e-005	7.2000e-004	0.0000	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.5757	0.5757	2.0000e-005	1.0000e-005	0.5805
Total	**2.1000e-004**	**1.7000e-004**	**2.2500e-003**	**1.0000e-005**	**7.2000e-004**	**0.0000**	**7.3000e-004**	**1.9000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**0.5757**	**0.5757**	**2.0000e-005**	**1.0000e-005**	**0.5805**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.2492					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3300e-003	8.9400e-003	0.0133	2.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	1.8724	1.8724	1.1000e-004	0.0000	1.8750
Total	**1.2505**	**8.9400e-003**	**0.0133**	**2.0000e-005**		**4.5000e-004**	**4.5000e-004**		**4.5000e-004**	**4.5000e-004**	**0.0000**	**1.8724**	**1.8724**	**1.1000e-004**	**0.0000**	**1.8750**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0700e-003	8.2000e-004	0.0115	3.0000e-005	3.9800e-003	2.0000e-005	4.0000e-003	1.0600e-003	2.0000e-005	1.0800e-003	0.0000	3.0767	3.0767	8.0000e-005	8.0000e-005	3.1015
Total	**1.0700e-003**	**8.2000e-004**	**0.0115**	**3.0000e-005**	**3.9800e-003**	**2.0000e-005**	**4.0000e-003**	**1.0600e-003**	**2.0000e-005**	**1.0800e-003**	**0.0000**	**3.0767**	**3.0767**	**8.0000e-005**	**8.0000e-005**	**3.1015**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.2492					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3300e-003	8.9400e-003	0.0133	2.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	1.8724	1.8724	1.1000e-004	0.0000	1.8750
Total	**1.2505**	**8.9400e-003**	**0.0133**	**2.0000e-005**		**4.5000e-004**	**4.5000e-004**		**4.5000e-004**	**4.5000e-004**	**0.0000**	**1.8724**	**1.8724**	**1.1000e-004**	**0.0000**	**1.8750**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0700e-003	8.2000e-004	0.0115	3.0000e-005	3.9800e-003	2.0000e-005	4.0000e-003	1.0600e-003	2.0000e-005	1.0800e-003	0.0000	3.0767	3.0767	8.0000e-005	8.0000e-005	3.1015
Total	**1.0700e-003**	**8.2000e-004**	**0.0115**	**3.0000e-005**	**3.9800e-003**	**2.0000e-005**	**4.0000e-003**	**1.0600e-003**	**2.0000e-005**	**1.0800e-003**	**0.0000**	**3.0767**	**3.0767**	**8.0000e-005**	**8.0000e-005**	**3.1015**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Unrefrigerated Warehouse-No	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352
Parking Lot	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352
Refrigerated Warehouse-No Rail	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352
Unrefrigerated Warehouse-No Rail	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.2787	1.3000e-004	0.0143	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0279	0.0279	7.0000e-005	0.0000	0.0297
Unmitigated	1.2787	1.3000e-004	0.0143	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0279	0.0279	7.0000e-005	0.0000	0.0297

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1476					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1297					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3200e-003	1.3000e-004	0.0143	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0279	0.0279	7.0000e-005	0.0000	0.0297
Total	**1.2787**	**1.3000e-004**	**0.0143**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.0279**	**0.0279**	**7.0000e-005**	**0.0000**	**0.0297**

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1476					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1297					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3200e-003	1.3000e-004	0.0143	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0279	0.0279	7.0000e-005	0.0000	0.0297
Total	**1.2787**	**1.3000e-004**	**0.0143**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.0279**	**0.0279**	**7.0000e-005**	**0.0000**	**0.0297**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Equipment Type	Number

11.0 Vegetation

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Cherry Avenue Warehouse (Construction - Unmitigated)

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	45.60	1000sqft	1.05	45,596.00	0
Unrefrigerated Warehouse-No Rail	258.38	1000sqft	5.93	258,376.00	0
Other Asphalt Surfaces	261.15	1000sqft	6.00	261,149.00	0
Parking Lot	559.00	Space	5.03	223,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with the Staff Report's model.

Land Use - See SWAPE's comments on "Underestimated Parking Land Use Size"

Construction Phase - See SWAPE's comments on "Unsubstantiated Changes to Individual Construction Phase Lengths"

Off-road Equipment - Consistent with the Staff Report's model.

Off-road Equipment - Consistent with the Staff Report's model.

Off-road Equipment - Consistent with the Staff Report's model.

Off-road Equipment - Consistent with the Staff Report's model.

Off-road Equipment - Consistent with the Staff Report's model.

Off-road Equipment - Consistent with the Staff Report's model.

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Trips and VMT - See SWAPE's comments on "Failure to Model All Required Demolition"

Demolition - See SWAPE's comments on "Failure to Model All Required Demolition"

Grading - Consistent with the Staff Report's model.

Architectural Coating - See SWAPE's comments on "Unsubstantiated Reductions to Architectural Coating Emission Factors"

Vehicle Trips - Consistent with the Staff Report's model.

Energy Use - Consitent with the Staff Report's model.

Water And Wastewater - Consistent with the Staff Report's model.

Solid Waste - Consistent with the Staff Report's model.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	13.00
tblConstructionPhase	NumDays	300.00	195.00
tblConstructionPhase	NumDays	20.00	13.00
tblConstructionPhase	NumDays	30.00	20.00
tblConstructionPhase	NumDays	20.00	13.00
tblConstructionPhase	NumDays	10.00	7.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	2.73	0.00
tblEnergyUse	LightingElect	1.91	0.00
tblEnergyUse	NT24E	13.61	0.00
tblEnergyUse	NT24E	1.34	0.00
tblEnergyUse	NT24NG	0.09	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	0.37	0.00
tblEnergyUse	T24E	0.58	0.00
tblEnergyUse	T24NG	0.93	0.00
tblEnergyUse	T24NG	0.83	0.00
tblLandUse	LandUseSquareFeet	45,600.00	45,596.00
tblLandUse	LandUseSquareFeet	258,380.00	258,376.00

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblLandUse	LandUseSquareFeet	261,150.00	261,149.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSolidWaste	SolidWasteGenerationRate	42.86	0.00
tblSolidWaste	SolidWasteGenerationRate	242.88	0.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	14.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	2.12	0.00
tblVehicleTrips	ST_TR	1.74	0.00
tblVehicleTrips	SU_TR	2.12	0.00
tblVehicleTrips	SU_TR	1.74	0.00
tblVehicleTrips	WD_TR	2.12	0.00
tblVehicleTrips	WD_TR	1.74	0.00
tblWater	IndoorWaterUseRate	10,545,000.00	0.00
tblWater	IndoorWaterUseRate	59,750,375.00	0.00

2.0 Emissions Summary

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	227.5921	42.2577	45.1245	0.1273	31.4010	1.7597	32.6656	10.3922	1.6190	12.0112	0.0000	13,344.1331	13,344.1331	1.7906	1.3910	13,797.9574
2024	227.5631	1.7565	4.6299	0.0103	0.7377	0.0855	0.8232	0.1957	0.0851	0.2808	0.0000	1,016.6059	1,016.6059	0.0362	0.0142	1,021.7320
Maximum	**227.5921**	**42.2577**	**45.1245**	**0.1273**	**31.4010**	**1.7597**	**32.6656**	**10.3922**	**1.6190**	**12.0112**	**0.0000**	**13,344.1331**	**13,344.1331**	**1.7906**	**1.3910**	**13,797.9574**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	227.5921	42.2577	45.1245	0.1273	31.4010	1.7597	32.6656	10.3922	1.6190	12.0112	0.0000	13,344.1331	13,344.1331	1.7906	1.3910	13,797.9574
2024	227.5631	1.7565	4.6299	0.0103	0.7377	0.0855	0.8232	0.1957	0.0851	0.2808	0.0000	1,016.6059	1,016.6059	0.0362	0.0142	1,021.7320
Maximum	**227.5921**	**42.2577**	**45.1245**	**0.1273**	**31.4010**	**1.7597**	**32.6656**	**10.3922**	**1.6190**	**12.0112**	**0.0000**	**13,344.1331**	**13,344.1331**	**1.7906**	**1.3910**	**13,797.9574**

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.0099	1.0400e-003	0.1146	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2460	0.2460	6.4000e-004		0.2621
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.0099**	**1.0400e-003**	**0.1146**	**1.0000e-005**	**0.0000**	**4.1000e-004**	**4.1000e-004**	**0.0000**	**4.1000e-004**	**4.1000e-004**		**0.2460**	**0.2460**	**6.4000e-004**	**0.0000**	**0.2621**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.0099	1.0400e-003	0.1146	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2460	0.2460	6.4000e-004		0.2621
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.0099**	**1.0400e-003**	**0.1146**	**1.0000e-005**	**0.0000**	**4.1000e-004**	**4.1000e-004**	**0.0000**	**4.1000e-004**	**4.1000e-004**		**0.2460**	**0.2460**	**6.4000e-004**	**0.0000**	**0.2621**

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition/Crushing	Demolition	1/15/2023	2/1/2023	5	13	
2	Site Preparation	Site Preparation	2/2/2023	2/10/2023	5	7	
3	Grading	Grading	2/11/2023	3/10/2023	5	20	
4	Building Construction	Building Construction	3/11/2023	12/8/2023	5	195	
5	Paving	Paving	12/9/2023	12/27/2023	5	13	
6	Architectural Coating	Architectural Coating	12/28/2023	1/15/2024	5	13	

Acres of Grading (Site Preparation Phase): 24.5

Acres of Grading (Grading Phase): 60

Acres of Paving: 11.03

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 455,958; Non-Residential Outdoor: 151,986; Striped Parking Area: 29,085 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition/Crushing	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition/Crushing	Crushing/Proc. Equipment	1	8.00	85	0.78
Demolition/Crushing	Excavators	3	8.00	158	0.38
Demolition/Crushing	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Crawler Tractors	4	8.00	212	0.43

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crawler Tractors	2	8.00	212	0.43
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	4.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Forklifts	5	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	5	8.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	8.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition/Crushing	7	18.00	10.00	1,730.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	14.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	16	331.00	129.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	66.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition/Crushing - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					28.8064	0.0000	28.8064	4.3615	0.0000	4.3615			0.0000			0.0000
Off-Road	2.7193	24.4686	23.9699	0.0459		1.1519	1.1519		1.0823	1.0823		4,411.5141	4,411.5141	1.0891		4,438.7423
Total	**2.7193**	**24.4686**	**23.9699**	**0.0459**	**28.8064**	**1.1519**	**29.9582**	**4.3615**	**1.0823**	**5.4439**		**4,411.5141**	**4,411.5141**	**1.0891**		**4,438.7423**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2886	17.3652	4.6349	0.0778	2.3294	0.1095	2.4389	0.6387	0.1048	0.7435		8,552.3229	8,552.3229	0.4713	1.3581	8,968.8189
Vendor	0.0115	0.3838	0.1487	1.8600e-003	0.0641	1.9300e-003	0.0660	0.0184	1.8500e-003	0.0203		200.2825	200.2825	6.7100e-003	0.0288	209.0311
Worker	0.0576	0.0402	0.6505	1.7800e-003	0.2012	1.2100e-003	0.2024	0.0534	1.1100e-003	0.0545		180.0136	180.0136	4.5400e-003	4.1500e-003	181.3650
Total	**0.3577**	**17.7892**	**5.4341**	**0.0815**	**2.5947**	**0.1127**	**2.7073**	**0.7105**	**0.1078**	**0.8182**		**8,932.6190**	**8,932.6190**	**0.4826**	**1.3910**	**9,359.2151**

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition/Crushing - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					28.8064	0.0000	28.8064	4.3615	0.0000	4.3615			0.0000			0.0000
Off-Road	2.7193	24.4686	23.9699	0.0459		1.1519	1.1519		1.0823	1.0823	0.0000	4,411.5141	4,411.5141	1.0891		4,438.7423
Total	**2.7193**	**24.4686**	**23.9699**	**0.0459**	**28.8064**	**1.1519**	**29.9582**	**4.3615**	**1.0823**	**5.4439**	**0.0000**	**4,411.5141**	**4,411.5141**	**1.0891**		**4,438.7423**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2886	17.3652	4.6349	0.0778	2.3294	0.1095	2.4389	0.6387	0.1048	0.7435		8,552.3229	8,552.3229	0.4713	1.3581	8,968.8189
Vendor	0.0115	0.3838	0.1487	1.8600e-003	0.0641	1.9300e-003	0.0660	0.0184	1.8500e-003	0.0203		200.2825	200.2825	6.7100e-003	0.0288	209.0311
Worker	0.0576	0.0402	0.6505	1.7800e-003	0.2012	1.2100e-003	0.2024	0.0534	1.1100e-003	0.0545		180.0136	180.0136	4.5400e-003	4.1500e-003	181.3650
Total	**0.3577**	**17.7892**	**5.4341**	**0.0815**	**2.5947**	**0.1127**	**2.7073**	**0.7105**	**0.1078**	**0.8182**		**8,932.6190**	**8,932.6190**	**0.4826**	**1.3910**	**9,359.2151**

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					21.7780	0.0000	21.7780	10.3315	0.0000	10.3315			0.0000			0.0000
Off-Road	3.8307	41.8798	18.2937	0.0569		1.7577	1.7577		1.6171	1.6171		5,514.0891	5,514.0891	1.7834		5,558.6733
Total	**3.8307**	**41.8798**	**18.2937**	**0.0569**	**21.7780**	**1.7577**	**23.5357**	**10.3315**	**1.6171**	**11.9486**		**5,514.0891**	**5,514.0891**	**1.7834**		**5,558.6733**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6100e-003	0.1535	0.0595	7.4000e-004	0.0256	7.7000e-004	0.0264	7.3800e-003	7.4000e-004	8.1200e-003		80.1130	80.1130	2.6800e-003	0.0115	83.6124
Worker	0.0576	0.0402	0.6505	1.7800e-003	0.2012	1.2100e-003	0.2024	0.0534	1.1100e-003	0.0545		180.0136	180.0136	4.5400e-003	4.1500e-003	181.3650
Total	**0.0622**	**0.1937**	**0.7100**	**2.5200e-003**	**0.2268**	**1.9800e-003**	**0.2288**	**0.0607**	**1.8500e-003**	**0.0626**		**260.1266**	**260.1266**	**7.2200e-003**	**0.0157**	**264.9775**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					21.7780	0.0000	21.7780	10.3315	0.0000	10.3315			0.0000			0.0000
Off-Road	3.8307	41.8798	18.2937	0.0569		1.7577	1.7577		1.6171	1.6171	0.0000	5,514.0891	5,514.0891	1.7834		5,558.6733
Total	**3.8307**	**41.8798**	**18.2937**	**0.0569**	**21.7780**	**1.7577**	**23.5357**	**10.3315**	**1.6171**	**11.9486**	**0.0000**	**5,514.0891**	**5,514.0891**	**1.7834**		**5,558.6733**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6100e-003	0.1535	0.0595	7.4000e-004	0.0256	7.7000e-004	0.0264	7.3800e-003	7.4000e-004	8.1200e-003		80.1130	80.1130	2.6800e-003	0.0115	83.6124
Worker	0.0576	0.0402	0.6505	1.7800e-003	0.2012	1.2100e-003	0.2024	0.0534	1.1100e-003	0.0545		180.0136	180.0136	4.5400e-003	4.1500e-003	181.3650
Total	**0.0622**	**0.1937**	**0.7100**	**2.5200e-003**	**0.2268**	**1.9800e-003**	**0.2288**	**0.0607**	**1.8500e-003**	**0.0626**		**260.1266**	**260.1266**	**7.2200e-003**	**0.0157**	**264.9775**

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.1206	33.4100	21.9388	0.0563		1.3456	1.3456		1.2379	1.2379		5,454.7394	5,454.7394	1.7642		5,498.8437
Total	**3.1206**	**33.4100**	**21.9388**	**0.0563**	**9.2036**	**1.3456**	**10.5491**	**3.6538**	**1.2379**	**4.8917**		**5,454.7394**	**5,454.7394**	**1.7642**		**5,498.8437**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0161	0.5374	0.2082	2.6100e-003	0.0897	2.7000e-003	0.0924	0.0258	2.5800e-003	0.0284		280.3955	280.3955	9.4000e-003	0.0403	292.6436
Worker	0.0640	0.0446	0.7228	1.9800e-003	0.2236	1.3400e-003	0.2249	0.0593	1.2400e-003	0.0605		200.0151	200.0151	5.0400e-003	4.6200e-003	201.5167
Total	**0.0801**	**0.5820**	**0.9310**	**4.5900e-003**	**0.3132**	**4.0400e-003**	**0.3173**	**0.0851**	**3.8200e-003**	**0.0889**		**480.4105**	**480.4105**	**0.0144**	**0.0449**	**494.1602**

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.1206	33.4100	21.9388	0.0563		1.3456	1.3456		1.2379	1.2379	0.0000	5,454.7394	5,454.7394	1.7642		5,498.8437
Total	**3.1206**	**33.4100**	**21.9388**	**0.0563**	**9.2036**	**1.3456**	**10.5491**	**3.6538**	**1.2379**	**4.8917**	**0.0000**	**5,454.7394**	**5,454.7394**	**1.7642**		**5,498.8437**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0161	0.5374	0.2082	2.6100e-003	0.0897	2.7000e-003	0.0924	0.0258	2.5800e-003	0.0284		280.3955	280.3955	9.4000e-003	0.0403	292.6436
Worker	0.0640	0.0446	0.7228	1.9800e-003	0.2236	1.3400e-003	0.2249	0.0593	1.2400e-003	0.0605		200.0151	200.0151	5.0400e-003	4.6200e-003	201.5167
Total	**0.0801**	**0.5820**	**0.9310**	**4.5900e-003**	**0.3132**	**4.0400e-003**	**0.3173**	**0.0851**	**3.8200e-003**	**0.0889**		**480.4105**	**480.4105**	**0.0144**	**0.0449**	**494.1602**

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.0930	28.3801	31.2440	0.0530		1.3610	1.3610		1.2815	1.2815		5,026.6997	5,026.6997	1.1886		5,056.4151
Total	**3.0930**	**28.3801**	**31.2440**	**0.0530**		**1.3610**	**1.3610**		**1.2815**	**1.2815**		**5,026.6997**	**5,026.6997**	**1.1886**		**5,056.4151**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1485	4.9515	1.9182	0.0240	0.8263	0.0249	0.8512	0.2379	0.0238	0.2617		2,583.6439	2,583.6439	0.0866	0.3715	2,696.5013
Worker	1.0593	0.7385	11.9623	0.0328	3.6998	0.0223	3.7221	0.9812	0.0205	1.0017		3,310.2495	3,310.2495	0.0835	0.0764	3,335.1012
Total	**1.2078**	**5.6899**	**13.8805**	**0.0568**	**4.5261**	**0.0472**	**4.5733**	**1.2191**	**0.0443**	**1.2634**		**5,893.8934**	**5,893.8934**	**0.1701**	**0.4478**	**6,031.6025**

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.0930	28.3801	31.2440	0.0530		1.3610	1.3610		1.2815	1.2815	0.0000	5,026.6997	5,026.6997	1.1886		5,056.4151
Total	**3.0930**	**28.3801**	**31.2440**	**0.0530**		**1.3610**	**1.3610**		**1.2815**	**1.2815**	**0.0000**	**5,026.6997**	**5,026.6997**	**1.1886**		**5,056.4151**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1485	4.9515	1.9182	0.0240	0.8263	0.0249	0.8512	0.2379	0.0238	0.2617		2,583.6439	2,583.6439	0.0866	0.3715	2,696.5013
Worker	1.0593	0.7385	11.9623	0.0328	3.6998	0.0223	3.7221	0.9812	0.0205	1.0017		3,310.2495	3,310.2495	0.0835	0.0764	3,335.1012
Total	**1.2078**	**5.6899**	**13.8805**	**0.0568**	**4.5261**	**0.0472**	**4.5733**	**1.2191**	**0.0443**	**1.2634**		**5,893.8934**	**5,893.8934**	**0.1701**	**0.4478**	**6,031.6025**

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	2.2230					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.2557**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0480	0.0335	0.5421	1.4800e-003	0.1677	1.0100e-003	0.1687	0.0445	9.3000e-004	0.0454		150.0113	150.0113	3.7800e-003	3.4600e-003	151.1375
Total	**0.0480**	**0.0335**	**0.5421**	**1.4800e-003**	**0.1677**	**1.0100e-003**	**0.1687**	**0.0445**	**9.3000e-004**	**0.0454**		**150.0113**	**150.0113**	**3.7800e-003**	**3.4600e-003**	**151.1375**

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	2.2230					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.2557**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0480	0.0335	0.5421	1.4800e-003	0.1677	1.0100e-003	0.1687	0.0445	9.3000e-004	0.0454		150.0113	150.0113	3.7800e-003	3.4600e-003	151.1375
Total	**0.0480**	**0.0335**	**0.5421**	**1.4800e-003**	**0.1677**	**1.0100e-003**	**0.1687**	**0.0445**	**9.3000e-004**	**0.0454**		**150.0113**	**150.0113**	**3.7800e-003**	**3.4600e-003**	**151.1375**

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	227.1253					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944		375.2641	375.2641	0.0225		375.8253
Total	**227.3809**	**1.7373**	**2.4148**	**3.9600e-003**		**0.0944**	**0.0944**		**0.0944**	**0.0944**		**375.2641**	**375.2641**	**0.0225**		**375.8253**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2112	0.1472	2.3852	6.5300e-003	0.7377	4.4400e-003	0.7422	0.1957	4.0900e-003	0.1997		660.0498	660.0498	0.0166	0.0152	665.0051
Total	**0.2112**	**0.1472**	**2.3852**	**6.5300e-003**	**0.7377**	**4.4400e-003**	**0.7422**	**0.1957**	**4.0900e-003**	**0.1997**		**660.0498**	**660.0498**	**0.0166**	**0.0152**	**665.0051**

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	227.1253					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944	0.0000	375.2641	375.2641	0.0225		375.8253
Total	**227.3809**	**1.7373**	**2.4148**	**3.9600e-003**		**0.0944**	**0.0944**		**0.0944**	**0.0944**	**0.0000**	**375.2641**	**375.2641**	**0.0225**		**375.8253**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2112	0.1472	2.3852	6.5300e-003	0.7377	4.4400e-003	0.7422	0.1957	4.0900e-003	0.1997		660.0498	660.0498	0.0166	0.0152	665.0051
Total	**0.2112**	**0.1472**	**2.3852**	**6.5300e-003**	**0.7377**	**4.4400e-003**	**0.7422**	**0.1957**	**4.0900e-003**	**0.1997**		**660.0498**	**660.0498**	**0.0166**	**0.0152**	**665.0051**

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	227.1253					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2410	1.6251	2.4135	3.9600e-003		0.0812	0.0812		0.0812	0.0812		375.2641	375.2641	0.0211		375.7923
Total	**227.3664**	**1.6251**	**2.4135**	**3.9600e-003**		**0.0812**	**0.0812**		**0.0812**	**0.0812**		**375.2641**	**375.2641**	**0.0211**		**375.7923**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1968	0.1314	2.2164	6.3500e-003	0.7377	4.2500e-003	0.7420	0.1957	3.9100e-003	0.1996		641.3419	641.3419	0.0151	0.0142	645.9397
Total	**0.1968**	**0.1314**	**2.2164**	**6.3500e-003**	**0.7377**	**4.2500e-003**	**0.7420**	**0.1957**	**3.9100e-003**	**0.1996**		**641.3419**	**641.3419**	**0.0151**	**0.0142**	**645.9397**

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	227.1253					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2410	1.6251	2.4135	3.9600e-003		0.0812	0.0812		0.0812	0.0812	0.0000	375.2641	375.2641	0.0211		375.7923
Total	**227.3664**	**1.6251**	**2.4135**	**3.9600e-003**		**0.0812**	**0.0812**		**0.0812**	**0.0812**	**0.0000**	**375.2641**	**375.2641**	**0.0211**		**375.7923**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1968	0.1314	2.2164	6.3500e-003	0.7377	4.2500e-003	0.7420	0.1957	3.9100e-003	0.1996		641.3419	641.3419	0.0151	0.0142	645.9397
Total	**0.1968**	**0.1314**	**2.2164**	**6.3500e-003**	**0.7377**	**4.2500e-003**	**0.7420**	**0.1957**	**3.9100e-003**	**0.1996**		**641.3419**	**641.3419**	**0.0151**	**0.0142**	**645.9397**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Unrefrigerated Warehouse-No	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352
Parking Lot	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352
Refrigerated Warehouse-No Rail	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352
Unrefrigerated Warehouse-No Rail	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.0099	1.0400e-003	0.1146	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2460	0.2460	6.4000e-004		0.2621
Unmitigated	7.0099	1.0400e-003	0.1146	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2460	0.2460	6.4000e-004		0.2621

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8089					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.1903					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0106	1.0400e-003	0.1146	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2460	0.2460	6.4000e-004		0.2621
Total	**7.0099**	**1.0400e-003**	**0.1146**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**		**0.2460**	**0.2460**	**6.4000e-004**		**0.2621**

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8089					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.1903					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0106	1.0400e-003	0.1146	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2460	0.2460	6.4000e-004		0.2621
Total	**7.0099**	**1.0400e-003**	**0.1146**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**		**0.2460**	**0.2460**	**6.4000e-004**		**0.2621**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Cherry Avenue Warehouse (Construction - Unmitigated)

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	45.60	1000sqft	1.05	45,596.00	0
Unrefrigerated Warehouse-No Rail	258.38	1000sqft	5.93	258,376.00	0
Other Asphalt Surfaces	261.15	1000sqft	6.00	261,149.00	0
Parking Lot	559.00	Space	5.03	223,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with the Staff Report's model.

Land Use - See SWAPE's comments on "Underestimated Parking Land Use Size"

Construction Phase - See SWAPE's comments on "Unsubstantiated Changes to Individual Construction Phase Lengths"

Off-road Equipment - Consistent with the Staff Report's model.

Off-road Equipment - Consistent with the Staff Report's model.

Off-road Equipment - Consistent with the Staff Report's model.

Off-road Equipment - Consistent with the Staff Report's model.

Off-road Equipment - Consistent with the Staff Report's model.

Off-road Equipment - Consistent with the Staff Report's model.

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Trips and VMT - See SWAPE's comments on "Failure to Model All Required Demolition"

Demolition - See SWAPE's comments on "Failure to Model All Required Demolition"

Grading - Consistent with the Staff Report's model.

Architectural Coating - See SWAPE's comments on "Unsubstantiated Reductions to Architectural Coating Emission Factors"

Vehicle Trips - Consistent with the Staff Report's model.

Energy Use - Consitent with the Staff Report's model.

Water And Wastewater - Consistent with the Staff Report's model.

Solid Waste - Consistent with the Staff Report's model.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	13.00
tblConstructionPhase	NumDays	300.00	195.00
tblConstructionPhase	NumDays	20.00	13.00
tblConstructionPhase	NumDays	30.00	20.00
tblConstructionPhase	NumDays	20.00	13.00
tblConstructionPhase	NumDays	10.00	7.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	2.73	0.00
tblEnergyUse	LightingElect	1.91	0.00
tblEnergyUse	NT24E	13.61	0.00
tblEnergyUse	NT24E	1.34	0.00
tblEnergyUse	NT24NG	0.09	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	0.37	0.00
tblEnergyUse	T24E	0.58	0.00
tblEnergyUse	T24NG	0.93	0.00
tblEnergyUse	T24NG	0.83	0.00
tblLandUse	LandUseSquareFeet	45,600.00	45,596.00
tblLandUse	LandUseSquareFeet	258,380.00	258,376.00

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblLandUse	LandUseSquareFeet	261,150.00	261,149.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSolidWaste	SolidWasteGenerationRate	42.86	0.00
tblSolidWaste	SolidWasteGenerationRate	242.88	0.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	14.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	2.12	0.00
tblVehicleTrips	ST_TR	1.74	0.00
tblVehicleTrips	SU_TR	2.12	0.00
tblVehicleTrips	SU_TR	1.74	0.00
tblVehicleTrips	WD_TR	2.12	0.00
tblVehicleTrips	WD_TR	1.74	0.00
tblWater	IndoorWaterUseRate	10,545,000.00	0.00
tblWater	IndoorWaterUseRate	59,750,375.00	0.00

2.0 Emissions Summary

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	227.6078	43.0455	44.2178	0.1273	31.4010	1.7597	32.6659	10.3922	1.6190	12.0112	0.0000	13,343.9956	13,343.9956	1.7906	1.3929	13,798.3404
2024	227.5785	1.7702	4.4526	9.9700e-003	0.7377	0.0855	0.8232	0.1957	0.0851	0.2808	0.0000	982.8532	982.8532	0.0364	0.0151	988.2709
Maximum	**227.6078**	**43.0455**	**44.2178**	**0.1273**	**31.4010**	**1.7597**	**32.6659**	**10.3922**	**1.6190**	**12.0112**	**0.0000**	**13,343.9956**	**13,343.9956**	**1.7906**	**1.3929**	**13,798.3404**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	227.6078	43.0455	44.2178	0.1273	31.4010	1.7597	32.6659	10.3922	1.6190	12.0112	0.0000	13,343.9956	13,343.9956	1.7906	1.3929	13,798.3404
2024	227.5785	1.7702	4.4526	9.9700e-003	0.7377	0.0855	0.8232	0.1957	0.0851	0.2808	0.0000	982.8532	982.8532	0.0364	0.0151	988.2709
Maximum	**227.6078**	**43.0455**	**44.2178**	**0.1273**	**31.4010**	**1.7597**	**32.6659**	**10.3922**	**1.6190**	**12.0112**	**0.0000**	**13,343.9956**	**13,343.9956**	**1.7906**	**1.3929**	**13,798.3404**

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.0099	1.0400e-003	0.1146	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2460	0.2460	6.4000e-004		0.2621
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.0099**	**1.0400e-003**	**0.1146**	**1.0000e-005**	**0.0000**	**4.1000e-004**	**4.1000e-004**	**0.0000**	**4.1000e-004**	**4.1000e-004**		**0.2460**	**0.2460**	**6.4000e-004**	**0.0000**	**0.2621**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.0099	1.0400e-003	0.1146	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2460	0.2460	6.4000e-004		0.2621
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.0099**	**1.0400e-003**	**0.1146**	**1.0000e-005**	**0.0000**	**4.1000e-004**	**4.1000e-004**	**0.0000**	**4.1000e-004**	**4.1000e-004**		**0.2460**	**0.2460**	**6.4000e-004**	**0.0000**	**0.2621**

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition/Crushing	Demolition	1/15/2023	2/1/2023	5	13	
2	Site Preparation	Site Preparation	2/2/2023	2/10/2023	5	7	
3	Grading	Grading	2/11/2023	3/10/2023	5	20	
4	Building Construction	Building Construction	3/11/2023	12/8/2023	5	195	
5	Paving	Paving	12/9/2023	12/27/2023	5	13	
6	Architectural Coating	Architectural Coating	12/28/2023	1/15/2024	5	13	

Acres of Grading (Site Preparation Phase): 24.5

Acres of Grading (Grading Phase): 60

Acres of Paving: 11.03

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 455,958; Non-Residential Outdoor: 151,986; Striped Parking Area: 29,085 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition/Crushing	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition/Crushing	Crushing/Proc. Equipment	1	8.00	85	0.78
Demolition/Crushing	Excavators	3	8.00	158	0.38
Demolition/Crushing	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Crawler Tractors	4	8.00	212	0.43

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crawler Tractors	2	8.00	212	0.43
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	4.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Forklifts	5	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	5	8.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	8.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition/Crushing	7	18.00	10.00	1,730.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	14.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	16	331.00	129.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	66.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition/Crushing - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					28.8064	0.0000	28.8064	4.3615	0.0000	4.3615			0.0000			0.0000
Off-Road	2.7193	24.4686	23.9699	0.0459		1.1519	1.1519		1.0823	1.0823		4,411.5141	4,411.5141	1.0891		4,438.7423
Total	**2.7193**	**24.4686**	**23.9699**	**0.0459**	**28.8064**	**1.1519**	**29.9582**	**4.3615**	**1.0823**	**5.4439**		**4,411.5141**	**4,411.5141**	**1.0891**		**4,438.7423**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2700	18.1307	4.6986	0.0779	2.3294	0.1098	2.4392	0.6387	0.1051	0.7437		8,561.3375	8,561.3375	0.4703	1.3596	8,978.2459
Vendor	0.0111	0.4019	0.1534	1.8600e-003	0.0641	1.9400e-003	0.0660	0.0184	1.8600e-003	0.0203		200.6203	200.6203	6.6800e-003	0.0289	209.3911
Worker	0.0619	0.0444	0.5979	1.6900e-003	0.2012	1.2100e-003	0.2024	0.0534	1.1100e-003	0.0545		170.5237	170.5237	4.6000e-003	4.4400e-003	171.9610
Total	**0.3430**	**18.5770**	**5.4499**	**0.0815**	**2.5947**	**0.1130**	**2.7076**	**0.7105**	**0.1080**	**0.8185**		**8,932.4815**	**8,932.4815**	**0.4816**	**1.3929**	**9,359.5980**

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition/Crushing - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					28.8064	0.0000	28.8064	4.3615	0.0000	4.3615			0.0000			0.0000
Off-Road	2.7193	24.4686	23.9699	0.0459		1.1519	1.1519		1.0823	1.0823	0.0000	4,411.5141	4,411.5141	1.0891		4,438.7423
Total	**2.7193**	**24.4686**	**23.9699**	**0.0459**	**28.8064**	**1.1519**	**29.9582**	**4.3615**	**1.0823**	**5.4439**	**0.0000**	**4,411.5141**	**4,411.5141**	**1.0891**		**4,438.7423**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2700	18.1307	4.6986	0.0779	2.3294	0.1098	2.4392	0.6387	0.1051	0.7437		8,561.3375	8,561.3375	0.4703	1.3596	8,978.2459
Vendor	0.0111	0.4019	0.1534	1.8600e-003	0.0641	1.9400e-003	0.0660	0.0184	1.8600e-003	0.0203		200.6203	200.6203	6.6800e-003	0.0289	209.3911
Worker	0.0619	0.0444	0.5979	1.6900e-003	0.2012	1.2100e-003	0.2024	0.0534	1.1100e-003	0.0545		170.5237	170.5237	4.6000e-003	4.4400e-003	171.9610
Total	**0.3430**	**18.5770**	**5.4499**	**0.0815**	**2.5947**	**0.1130**	**2.7076**	**0.7105**	**0.1080**	**0.8185**		**8,932.4815**	**8,932.4815**	**0.4816**	**1.3929**	**9,359.5980**

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					21.7780	0.0000	21.7780	10.3315	0.0000	10.3315			0.0000			0.0000
Off-Road	3.8307	41.8798	18.2937	0.0569		1.7577	1.7577		1.6171	1.6171		5,514.0891	5,514.0891	1.7834		5,558.6733
Total	**3.8307**	**41.8798**	**18.2937**	**0.0569**	**21.7780**	**1.7577**	**23.5357**	**10.3315**	**1.6171**	**11.9486**		**5,514.0891**	**5,514.0891**	**1.7834**		**5,558.6733**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4500e-003	0.1608	0.0614	7.5000e-004	0.0256	7.8000e-004	0.0264	7.3800e-003	7.4000e-004	8.1200e-003		80.2481	80.2481	2.6700e-003	0.0116	83.7564
Worker	0.0619	0.0444	0.5979	1.6900e-003	0.2012	1.2100e-003	0.2024	0.0534	1.1100e-003	0.0545		170.5237	170.5237	4.6000e-003	4.4400e-003	171.9610
Total	**0.0663**	**0.2051**	**0.6593**	**2.4400e-003**	**0.2268**	**1.9900e-003**	**0.2288**	**0.0607**	**1.8500e-003**	**0.0626**		**250.7718**	**250.7718**	**7.2700e-003**	**0.0160**	**255.7175**

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					21.7780	0.0000	21.7780	10.3315	0.0000	10.3315			0.0000			0.0000
Off-Road	3.8307	41.8798	18.2937	0.0569		1.7577	1.7577		1.6171	1.6171	0.0000	5,514.0891	5,514.0891	1.7834		5,558.6733
Total	**3.8307**	**41.8798**	**18.2937**	**0.0569**	**21.7780**	**1.7577**	**23.5357**	**10.3315**	**1.6171**	**11.9486**	**0.0000**	**5,514.0891**	**5,514.0891**	**1.7834**		**5,558.6733**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4500e-003	0.1608	0.0614	7.5000e-004	0.0256	7.8000e-004	0.0264	7.3800e-003	7.4000e-004	8.1200e-003		80.2481	80.2481	2.6700e-003	0.0116	83.7564
Worker	0.0619	0.0444	0.5979	1.6900e-003	0.2012	1.2100e-003	0.2024	0.0534	1.1100e-003	0.0545		170.5237	170.5237	4.6000e-003	4.4400e-003	171.9610
Total	**0.0663**	**0.2051**	**0.6593**	**2.4400e-003**	**0.2268**	**1.9900e-003**	**0.2288**	**0.0607**	**1.8500e-003**	**0.0626**		**250.7718**	**250.7718**	**7.2700e-003**	**0.0160**	**255.7175**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.1206	33.4100	21.9388	0.0563		1.3456	1.3456		1.2379	1.2379		5,454.7394	5,454.7394	1.7642		5,498.8437
Total	**3.1206**	**33.4100**	**21.9388**	**0.0563**	**9.2036**	**1.3456**	**10.5491**	**3.6538**	**1.2379**	**4.8917**		**5,454.7394**	**5,454.7394**	**1.7642**		**5,498.8437**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0156	0.5626	0.2147	2.6100e-003	0.0897	2.7200e-003	0.0924	0.0258	2.6000e-003	0.0284		280.8684	280.8684	9.3500e-003	0.0404	293.1475
Worker	0.0688	0.0493	0.6644	1.8700e-003	0.2236	1.3400e-003	0.2249	0.0593	1.2400e-003	0.0605		189.4707	189.4707	5.1100e-003	4.9300e-003	191.0678
Total	**0.0843**	**0.6119**	**0.8791**	**4.4800e-003**	**0.3132**	**4.0600e-003**	**0.3173**	**0.0851**	**3.8400e-003**	**0.0890**		**470.3392**	**470.3392**	**0.0145**	**0.0454**	**484.2154**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.1206	33.4100	21.9388	0.0563		1.3456	1.3456		1.2379	1.2379	0.0000	5,454.7394	5,454.7394	1.7642		5,498.8437
Total	**3.1206**	**33.4100**	**21.9388**	**0.0563**	**9.2036**	**1.3456**	**10.5491**	**3.6538**	**1.2379**	**4.8917**	**0.0000**	**5,454.7394**	**5,454.7394**	**1.7642**		**5,498.8437**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0156	0.5626	0.2147	2.6100e-003	0.0897	2.7200e-003	0.0924	0.0258	2.6000e-003	0.0284		280.8684	280.8684	9.3500e-003	0.0404	293.1475
Worker	0.0688	0.0493	0.6644	1.8700e-003	0.2236	1.3400e-003	0.2249	0.0593	1.2400e-003	0.0605		189.4707	189.4707	5.1100e-003	4.9300e-003	191.0678
Total	**0.0843**	**0.6119**	**0.8791**	**4.4800e-003**	**0.3132**	**4.0600e-003**	**0.3173**	**0.0851**	**3.8400e-003**	**0.0890**		**470.3392**	**470.3392**	**0.0145**	**0.0454**	**484.2154**

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.0930	28.3801	31.2440	0.0530		1.3610	1.3610		1.2815	1.2815		5,026.6997	5,026.6997	1.1886		5,056.4151
Total	**3.0930**	**28.3801**	**31.2440**	**0.0530**		**1.3610**	**1.3610**		**1.2815**	**1.2815**		**5,026.6997**	**5,026.6997**	**1.1886**		**5,056.4151**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1434	5.1841	1.9785	0.0241	0.8263	0.0251	0.8514	0.2379	0.0240	0.2619		2,588.0019	2,588.0019	0.0862	0.3724	2,701.1452
Worker	1.1381	0.8157	10.9953	0.0310	3.6998	0.0223	3.7221	0.9812	0.0205	1.0017		3,135.7404	3,135.7404	0.0846	0.0816	3,162.1722
Total	**1.2815**	**5.9998**	**12.9739**	**0.0551**	**4.5261**	**0.0473**	**4.5734**	**1.2191**	**0.0445**	**1.2636**		**5,723.7423**	**5,723.7423**	**0.1708**	**0.4540**	**5,863.3174**

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.0930	28.3801	31.2440	0.0530		1.3610	1.3610		1.2815	1.2815	0.0000	5,026.6997	5,026.6997	1.1886		5,056.4151
Total	**3.0930**	**28.3801**	**31.2440**	**0.0530**		**1.3610**	**1.3610**		**1.2815**	**1.2815**	**0.0000**	**5,026.6997**	**5,026.6997**	**1.1886**		**5,056.4151**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1434	5.1841	1.9785	0.0241	0.8263	0.0251	0.8514	0.2379	0.0240	0.2619		2,588.0019	2,588.0019	0.0862	0.3724	2,701.1452
Worker	1.1381	0.8157	10.9953	0.0310	3.6998	0.0223	3.7221	0.9812	0.0205	1.0017		3,135.7404	3,135.7404	0.0846	0.0816	3,162.1722
Total	**1.2815**	**5.9998**	**12.9739**	**0.0551**	**4.5261**	**0.0473**	**4.5734**	**1.2191**	**0.0445**	**1.2636**		**5,723.7423**	**5,723.7423**	**0.1708**	**0.4540**	**5,863.3174**

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	2.2230					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.2557**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0516	0.0370	0.4983	1.4100e-003	0.1677	1.0100e-003	0.1687	0.0445	9.3000e-004	0.0454		142.1030	142.1030	3.8300e-003	3.7000e-003	143.3009
Total	**0.0516**	**0.0370**	**0.4983**	**1.4100e-003**	**0.1677**	**1.0100e-003**	**0.1687**	**0.0445**	**9.3000e-004**	**0.0454**		**142.1030**	**142.1030**	**3.8300e-003**	**3.7000e-003**	**143.3009**

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	2.2230					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.2557**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0516	0.0370	0.4983	1.4100e-003	0.1677	1.0100e-003	0.1687	0.0445	9.3000e-004	0.0454		142.1030	142.1030	3.8300e-003	3.7000e-003	143.3009
Total	**0.0516**	**0.0370**	**0.4983**	**1.4100e-003**	**0.1677**	**1.0100e-003**	**0.1687**	**0.0445**	**9.3000e-004**	**0.0454**		**142.1030**	**142.1030**	**3.8300e-003**	**3.7000e-003**	**143.3009**

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	227.1253					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944		375.2641	375.2641	0.0225		375.8253
Total	**227.3809**	**1.7373**	**2.4148**	**3.9600e-003**		**0.0944**	**0.0944**		**0.0944**	**0.0944**		**375.2641**	**375.2641**	**0.0225**		**375.8253**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2269	0.1627	2.1924	6.1900e-003	0.7377	4.4400e-003	0.7422	0.1957	4.0900e-003	0.1997		625.2534	625.2534	0.0169	0.0163	630.5238
Total	**0.2269**	**0.1627**	**2.1924**	**6.1900e-003**	**0.7377**	**4.4400e-003**	**0.7422**	**0.1957**	**4.0900e-003**	**0.1997**		**625.2534**	**625.2534**	**0.0169**	**0.0163**	**630.5238**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	227.1253					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944	0.0000	375.2641	375.2641	0.0225		375.8253
Total	**227.3809**	**1.7373**	**2.4148**	**3.9600e-003**		**0.0944**	**0.0944**		**0.0944**	**0.0944**	**0.0000**	**375.2641**	**375.2641**	**0.0225**		**375.8253**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2269	0.1627	2.1924	6.1900e-003	0.7377	4.4400e-003	0.7422	0.1957	4.0900e-003	0.1997		625.2534	625.2534	0.0169	0.0163	630.5238
Total	**0.2269**	**0.1627**	**2.1924**	**6.1900e-003**	**0.7377**	**4.4400e-003**	**0.7422**	**0.1957**	**4.0900e-003**	**0.1997**		**625.2534**	**625.2534**	**0.0169**	**0.0163**	**630.5238**

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	227.1253					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2410	1.6251	2.4135	3.9600e-003		0.0812	0.0812		0.0812	0.0812		375.2641	375.2641	0.0211		375.7923
Total	**227.3664**	**1.6251**	**2.4135**	**3.9600e-003**		**0.0812**	**0.0812**		**0.0812**	**0.0812**		**375.2641**	**375.2641**	**0.0211**		**375.7923**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2121	0.1451	2.0391	6.0100e-003	0.7377	4.2500e-003	0.7420	0.1957	3.9100e-003	0.1996		607.5891	607.5891	0.0153	0.0151	612.4786
Total	**0.2121**	**0.1451**	**2.0391**	**6.0100e-003**	**0.7377**	**4.2500e-003**	**0.7420**	**0.1957**	**3.9100e-003**	**0.1996**		**607.5891**	**607.5891**	**0.0153**	**0.0151**	**612.4786**

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	227.1253					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2410	1.6251	2.4135	3.9600e-003		0.0812	0.0812		0.0812	0.0812	0.0000	375.2641	375.2641	0.0211		375.7923
Total	**227.3664**	**1.6251**	**2.4135**	**3.9600e-003**		**0.0812**	**0.0812**		**0.0812**	**0.0812**	**0.0000**	**375.2641**	**375.2641**	**0.0211**		**375.7923**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2121	0.1451	2.0391	6.0100e-003	0.7377	4.2500e-003	0.7420	0.1957	3.9100e-003	0.1996		607.5891	607.5891	0.0153	0.0151	612.4786
Total	**0.2121**	**0.1451**	**2.0391**	**6.0100e-003**	**0.7377**	**4.2500e-003**	**0.7420**	**0.1957**	**3.9100e-003**	**0.1996**		**607.5891**	**607.5891**	**0.0153**	**0.0151**	**612.4786**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Unrefrigerated Warehouse-No	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352
Parking Lot	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352
Refrigerated Warehouse-No Rail	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352
Unrefrigerated Warehouse-No Rail	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.0099	1.0400e-003	0.1146	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2460	0.2460	6.4000e-004		0.2621
Unmitigated	7.0099	1.0400e-003	0.1146	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2460	0.2460	6.4000e-004		0.2621

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8089					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.1903					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0106	1.0400e-003	0.1146	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2460	0.2460	6.4000e-004		0.2621
Total	**7.0099**	**1.0400e-003**	**0.1146**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**		**0.2460**	**0.2460**	**6.4000e-004**		**0.2621**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8089					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.1903					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0106	1.0400e-003	0.1146	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004		0.2460	0.2460	6.4000e-004		0.2621
Total	**7.0099**	**1.0400e-003**	**0.1146**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**		**0.2460**	**0.2460**	**6.4000e-004**		**0.2621**

7.0 Water Detail

7.1 Mitigation Measures Water

Cherry Avenue Warehouse (Construction - Unmitigated) - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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Geologic and Hydrogeologic Characterization
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
Industrial Stormwater Compliance
CEQA Review

Education:

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:

California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

Professional Experience:

Matt has 30 years of experience in environmental policy, contaminant assessment and remediation, stormwater compliance, and CEQA review. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) and directed efforts to improve hydrogeologic characterization and water quality monitoring. For the past 15 years, as a founding partner with SWAPE, Matt has developed extensive client relationships and has managed complex projects that include consultation as an expert witness and a regulatory specialist, and a manager of projects ranging from industrial stormwater compliance to CEQA review of impacts from hazardous waste, air quality and greenhouse gas emissions.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2104, 2017;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 300 environmental impact reports and negative declarations since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at more than 100 industrial facilities.
- Expert witness on numerous cases including, for example, perfluorooctanoic acid (PFOA) contamination of groundwater, MTBE litigation, air toxins at hazards at a school, CERCLA compliance in assessment and remediation, and industrial stormwater contamination.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.
- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted

public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9.

Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific

principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt is currently a part time geology instructor at Golden West College in Huntington Beach, California where he taught from 2010 to 2014 and in 2017.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Coloradao.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal repesentatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F**. 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

Hagemann, M. F., Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

Hagemann, M.F., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

Hagemann, M.F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examinations, 2009-2011.

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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2656 29th Street, Suite 201
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Paul Rosenfeld, Ph.D.

Chemical Fate and Transport & Air Dispersion Modeling

Principal Environmental Chemist

Risk Assessment & Remediation Specialist

Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Focus on wastewater treatment.

Professional Experience

Dr. Rosenfeld has over 25 years of experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, industrial, military and agricultural sources, unconventional oil drilling operations, and locomotive and construction engines. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities. Dr. Rosenfeld has also successfully modeled exposure to contaminants distributed by water systems and via vapor intrusion.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, creosote, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at sites and has testified as an expert witness on numerous cases involving exposure to soil, water and air contaminants from industrial, railroad, agricultural, and military sources.

Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex H_2O Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Publications:

Rosenfeld P. E., Spaeth K., Hallman R., Bressler R., Smith, G., (2022) Cancer Risk and Diesel Exhaust Exposure Among Railroad Workers. *Water Air Soil Pollution.* **233,** 171.

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health.* 18:48

Simons, R.A., Seo, Y. **Rosenfeld, P**., (2015) Modeling the Effect of Refinery Emission On Residential Property Value. Journal of Real Estate Research. 27(3):321-342

Chen, J. A, Zapata A. R., Sutherland A. J., Molmen, D.R., Chow, B. S., Wu, L. E., **Rosenfeld, P. E.,** Hesse, R. C., (2012) Sulfur Dioxide and Volatile Organic Compound Exposure To A Community In Texas City Texas Evaluated Using Aermod and Empirical Data. *American Journal of Environmental Science*, 8(6), 622-632.

Rosenfeld, P.E. & Feng, L. (2011). *The Risks of Hazardous Waste.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2011). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry*, Amsterdam: Elsevier Publishing.

Gonzalez, J., Feng, L., Sutherland, A., Waller, C., Sok, H., Hesse, R., **Rosenfeld, P.** (2010). PCBs and Dioxins/Furans in Attic Dust Collected Near Former PCB Production and Secondary Copper Facilities in Sauget, IL. *Procedia Environmental Sciences*. 113–125.

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld, P.E.** (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health*. 73(6), 34-46.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2010). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2009). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Petroleum Industry*. Amsterdam: Elsevier Publishing.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. *WIT Transactions on Ecology and the Environment, Air Pollution,* 123 (17), 319-327.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. *Organohalogen Compounds*, 70, 002252-002255.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, 70, 000527-000530.

Hensley, A.R. A. Scott, J. J. J. Clark, **Rosenfeld, P.E.** (2007). Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility. *Environmental Research*. 105, 194-197.

Rosenfeld, P.E., J. J. J. Clark, A. R. Hensley, M. Suffet. (2007). The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities. *Water Science & Technology* 55(5), 345-357.

Rosenfeld, P. E., M. Suffet. (2007). The Anatomy Of Odour Wheels For Odours Of Drinking Water, Wastewater, Compost And The Urban Environment. *Water Science & Technology* 55(5), 335-344.

Sullivan, P. J. Clark, J.J.J., Agardy, F. J., **Rosenfeld, P.E.** (2007). *Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities.* Boston Massachusetts: Elsevier Publishing

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash. *Water Science and Technology*. 49(9),171-178.

Rosenfeld P. E., J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme For The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC) 2004.* New Orleans, October 2-6, 2004.

Rosenfeld, P.E., and Suffet, I.H. (2004). Understanding Odorants Associated With Compost, Biomass Facilities, and the Land Application of Biosolids. *Water Science and Technology*. 49(9), 193-199.

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash, *Water Science and Technology*, 49(9), 171-178.

Rosenfeld, P. E., Grey, M. A., Sellew, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofilter. *Water Environment Research*. 76(4), 310-315.

Rosenfeld, P.E., Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office*, Publications Clearinghouse (MS–6), Sacramento, CA Publication #442-02-008.

Rosenfeld, P.E., and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.

Rosenfeld, P.E., and Henry C. L., (2000). Wood ash control of odor emissions from biosolids application. *Journal of Environmental Quality.* 29, 1662-1668.

Rosenfeld, P.E., C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affect on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.

Rosenfeld, P.E., and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*, 73, 388-393.

Rosenfeld, P.E., and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

Chollack, T. and **P. Rosenfeld. (**1998). Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

Rosenfeld, P. E. (1992). The Mount Liamuiga Crater Trail. *Heritage Magazine of St. Kitts*, 3(2).

Rosenfeld, P. E. (1993). High School Biogas Project to Prevent Deforestation On St. Kitts. *Biomass Users Network*, 7(1).

Rosenfeld, P. E. (1998). Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

Rosenfeld, P. E. (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

Rosenfeld, P. E. (1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

Presentations:

Rosenfeld, P.E., "The science for Perfluorinated Chemicals (PFAS): What makes remediation so hard?" Law Seminars International, (May 9-10, 2018) 800 Fifth Avenue, Suite 101 Seattle, WA.

Rosenfeld, P.E., Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society.* Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution.* Lecture conducted from Boston, MA.

Rosenfeld, P.E. (April 19-23, 2009). Perfluoroctanoic Acid (PFOA) and Perfluoroactane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

Rosenfeld, P.E. (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

Rosenfeld, P. E. (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water.* Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The *23rd Annual International Conferences on Soils Sediment and Water*. Lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld P. E. (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

Rosenfeld P. E. (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting.* Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition.* Lecture conducted from Boston Massachusetts.

Paul Rosenfeld Ph.D. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference.* Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

Paul Rosenfeld Ph.D. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference.* Lecture conducted from Hilton Hotel in Irvine, California.

Paul Rosenfeld Ph.D. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference.* Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

Paul Rosenfeld Ph.D. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference.* Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

Paul Rosenfeld, Ph.D. (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

Paul Rosenfeld, Ph.D. (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants*.. Lecture conducted from Hyatt Regency Phoenix Arizona.

Paul Rosenfeld, Ph.D. (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

Paul Rosenfeld, Ph.D. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington..

Rosenfeld, P.E. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conferenc*e. Lecture conducted from Indianapolis, Maryland.

Rosenfeld. P.E. (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation.* Lecture conducted from Anaheim California.

Rosenfeld. P.E. (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest.* Lecture conducted from Ocean Shores, California.

Rosenfeld, P.E. (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell.* Lecture conducted from Seattle Washington.

Rosenfeld, P.E., C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest.* Lecture conducted from Lake Chelan, Washington.

Rosenfeld, P.E, C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded:

California Integrated Waste Management Board. $41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: $10,000 grant awarded to San Diego State University.
Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. $100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. $20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: $10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: $15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. $500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

Deposition and/or Trial Testimony:

In the Superior Court of the State of California, County of San Bernardino
Billy Wildrick, Plaintiff vs. BNSF Railway Company
Case No. CIVDS1711810
Rosenfeld Deposition 10-17-2022

In the State Court of Bibb County, State of Georgia
Richard Hutcherson, Plaintiff vs Norfolk Southern Railway Company
Case No. 10-SCCV-092007
Rosenfeld Deposition 10-6-2022

In the Civil District Court of the Parish of Orleans, State of Louisiana
Millard Clark, Plaintiff vs. Dixie Carriers, Inc. et al.
Case No. 2020-03891
Rosenfeld Deposition 9-15-2022

In The Circuit Court of Livingston County, State of Missouri, Circuit Civil Division
Shirley Ralls, Plaintiff vs. Canadian Pacific Railway and Soo Line Railroad
Case No. 18-LV-CC0020
Rosenfeld Deposition 9-7-2022

In The Circuit Court of the 13th Judicial Circuit Court, Hillsborough County, Florida Civil Division
Jonny C. Daniels, Plaintiff vs. CSX Transportation Inc.
Case No. 20-CA-5502
Rosenfeld Deposition 9-1-2022

In The Circuit Court of St. Louis County, State of Missouri
Kieth Luke et. al. Plaintiff vs. Monsanto Company et. al.
Case No. 19SL-CC03191
Rosenfeld Deposition 8-25-2022

In The Circuit Court of the 13th Judicial Circuit Court, Hillsborough County, Florida Civil Division
Jeffery S. Lamotte, Plaintiff vs. CSX Transportation Inc.
Case No. NO. 20-CA-0049
Rosenfeld Deposition 8-22-2022

In State of Minnesota District Court, County of St. Louis Sixth Judicial District
Greg Bean, Plaintiff vs. Soo Line Railroad Company
Case No. 69-DU-CV-21-760
Rosenfeld Deposition 8-17-2022

In United States District Court Western District of Washington at Tacoma, Washington
John D. Fitzgerald Plaintiff vs. BNSF
Case No. 3:21-cv-05288-RJB
Rosenfeld Deposition 8-11-2022

In Circuit Court of the Sixth Judicial Circuit, Macon Illinois
Rocky Bennyhoff Plaintiff vs. Norfolk Southern
Case No. 20-L-56
Rosenfeld Deposition 8-3-2022

In Court of Common Pleas, Hamilton County Ohio
Joe Briggins Plaintiff vs. CSX
Case No. A2004464
Rosenfeld Deposition 6-17-2022

In the Superior Court of the State of California, County of Kern
George LaFazia vs. BNSF Railway Company.
Case No. BCV-19-103087
Rosenfeld Deposition 5-17-2022

In the Circuit Court of Cook County Illinois
Bobby Earles vs. Penn Central et. al.
Case No. 2020-L-000550
Rosenfeld Deposition 4-16-2022

In United States District Court Easter District of Florida
Albert Hartman Plaintiff vs. Illinois Central
Case No. 2:20-cv-1633
Rosenfeld Deposition 4-4-2022

In the Circuit Court of the 4th Judicial Circuit, in and For Duval County, Florida
Barbara Steele vs. CSX Transportation
Case No.16-219-Ca-008796
Rosenfeld Deposition 3-15-2022

In United States District Court Easter District of New York
Romano et al. vs. Northrup Grumman Corporation
Case No. 16-cv-5760
Rosenfeld Deposition 3-10-2022

In the Circuit Court of Cook County Illinois
Linda Benjamin vs. Illinois Central
Case No. No. 2019 L 007599
Rosenfeld Deposition 1-26-2022

In the Circuit Court of Cook County Illinois
Donald Smith vs. Illinois Central
Case No. No. 2019 L 003426
Rosenfeld Deposition 1-24-2022

In the Circuit Court of Cook County Illinois
Jan Holeman vs. BNSF
Case No. 2019 L 000675
Rosenfeld Deposition 1-18-2022

In the State Court of Bibb County State of Georgia
Dwayne B. Garrett vs. Norfolk Southern
Case No. 20-SCCV-091232
Rosenfeld Deposition 11-10-2021

In the Circuit Court of Cook County Illinois
Joseph Ruepke vs. BNSF
Case No. 2019 L 007730
Rosenfeld Deposition 11-5-2021

In the United States District Court For the District of Nebraska
Steven Gillett vs. BNSF
Case No. 4:20-cv-03120
Rosenfeld Deposition 10-28-2021

In the Montana Thirteenth District Court of Yellowstone County
James Eadus vs. Soo Line Railroad and BNSF
Case No. DV 19-1056
Rosenfeld Deposition 10-21-2021

In the Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al.cvs. Cerro Flow Products, Inc.
Case No. 0i9-L-2295
Rosenfeld Deposition 5-14-2021
Trial October 8-4-2021

In the Circuit Court of Cook County Illinois
Joseph Rafferty vs. Consolidated Rail Corporation and National Railroad Passenger Corporation d/b/a AMTRAK,
Case No. 18-L-6845
Rosenfeld Deposition 6-28-2021

In the United States District Court For the Northern District of Illinois
Theresa Romcoe vs. Northeast Illinois Regional Commuter Railroad Corporation d/b/a METRA Rail
Case No. 17-cv-8517
Rosenfeld Deposition 5-25-2021

In the Superior Court of the State of Arizona In and For the Cunty of Maricopa
Mary Tryon et al. vs. The City of Pheonix v. Cox Cactus Farm, L.L.C., Utah Shelter Systems, Inc.
Case No. CV20127-094749
Rosenfeld Deposition 5-7-2021

In the United States District Court for the Eastern District of Texas Beaumont Division
Robinson, Jeremy et al vs. CNA Insurance Company et al.
Case No. 1:17-cv-000508
Rosenfeld Deposition 3-25-2021

In the Superior Court of the State of California, County of San Bernardino
Gary Garner, Personal Representative for the Estate of Melvin Garner vs. BNSF Railway Company.
Case No. 1720288
Rosenfeld Deposition 2-23-2021

In the Superior Court of the State of California, County of Los Angeles, Spring Street Courthouse
Benny M Rodriguez vs. Union Pacific Railroad, A Corporation, et al.
Case No. 18STCV01162
Rosenfeld Deposition 12-23-2020

In the Circuit Court of Jackson County, Missouri
Karen Cornwell, Plaintiff, vs. Marathon Petroleum, LP, Defendant.
Case No. 1716-CV10006
Rosenfeld Deposition 8-30-2019

In the United States District Court For The District of New Jersey
Duarte et al, Plaintiffs, vs. United States Metals Refining Company et. al. Defendant.
Case No. 2:17-cv-01624-ES-SCM
Rosenfeld Deposition 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division
M/T Carla Maersk vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS "Conti Perdido" Defendant.
Case No. 3:15-CV-00106 consolidated with 3:15-CV-00237
Rosenfeld Deposition 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants
Case No. BC615636
Rosenfeld Deposition 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants
Case No. BC646857
Rosenfeld Deposition 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado
Bells et al. Plaintiffs vs. The 3M Company et al., Defendants
Case No. 1:16-cv-02531-RBJ
Rosenfeld Deposition 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District
Phillip Bales et al., Plaintiff vs. Dow Agrosciences, LLC, et al., Defendants
Cause No. 1923
Rosenfeld Deposition 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintifs vs. Chevron Corporation, et al., Defendants
Cause No. C12-01481
Rosenfeld Deposition 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition 8-23-2017

In United States District Court For The Southern District of Mississippi
Guy Manuel vs. The BP Exploration et al., Defendants
Case No. 1:19-cv-00315-RHW
Rosenfeld Deposition 4-22-2020

In The Superior Court of the State of California, For The County of Los Angeles
Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC
Case No. LC102019 (c/w BC582154)
Rosenfeld Deposition 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., Plaintiffs, vs. Meritor Inc., et al., Defendants
Case No. 4:16-cv-52-DMB-JVM
Rosenfeld Deposition July 2017

In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No. RG14711115
Rosenfeld Deposition September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No. LALA002187
Rosenfeld Deposition August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action No. 14-C-30000
Rosenfeld Deposition June 2015

In The Iowa District Court for Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No. 4980
Rosenfeld Deposition May 2015

In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.
Case No. CACE07030358 (26)
Rosenfeld Deposition December 2014

In the County Court of Dallas County Texas
Lisa Parr et al, Plaintiff, vs. Aruba et al, Defendant.
Case No. cc-11-01650-E
Rosenfeld Deposition: March and September 2013
Rosenfeld Trial April 2014

In the Court of Common Pleas of Tuscarawas County Ohio
John Michael Abicht, et al., Plaintiffs, vs. Republic Services, Inc., et al., Defendants
Case No. 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)
Rosenfeld Deposition October 2012

In the United States District Court for the Middle District of Alabama, Northern Division
James K. Benefield, et al., Plaintiffs, vs. International Paper Company, Defendant.
Civil Action No. 2:09-cv-232-WHA-TFM
Rosenfeld Deposition July 2010, June 2011

In the Circuit Court of Jefferson County Alabama
Jaeanette Moss Anthony, et al., Plaintiffs, vs. Drummond Company Inc., et al., Defendants
Civil Action No. CV 2008-2076
Rosenfeld Deposition September 2010

In the United States District Court, Western District Lafayette Division
Ackle et al., Plaintiffs, vs. Citgo Petroleum Corporation, et al., Defendants.
Case No. 2:07CV1052
Rosenfeld Deposition July 2009

Attachment 6:
Virtual Scoping Meeting Comments

VIRTUAL SCOPING MEETING COMMENTS
NOVEMBER 1, 2023
5910 Cherry Avenue Industrial Building Project (EIR)

Commenter Name	Comments
Verbal Comments	
Manuel Valenzuela	- Commenter notes that the existing office building and potentially some accessory buildings were designed by master architect Kenneth Wing, who was the architect of several prominent buildings in Long Beach and is mentioned in the Historic Preservation Element of the City's General Plan.
	- Commenter requests that the EIR analyzes impacts to the potentially historic/cultural resources at the site and the scope of the analysis considers that there are only a few identified historic buildings in North Long Beach.
Kirk Davis	- Commenter states that there are known Brownfield Sites in the area and existing groundwater/soil contamination at the site.
	- Commenter requests that the EIR discuss impacts associated with potential hazardous materials release, AQ/GHG impacts, and traffic impacts to nearby neighborhoods, and also considers mitigation measures submitted to the record in an attorney letter.
Hilda Gaytan	- Commenter asks for clarification on the difference between current project and the version submitted prior, and asks if tenants are already known.
Juanita Dopelman	- Commenter asks that the EIR considers the need for green and community space in the project area.
	- Requests that there is a partnership between residents and the future owner/operator of the project site.
Areceli Sanchez	- Commenter states that the Cherry Manor community located between 63rd and 65th Street has started a petition and is opposed to the project.
	- Commenter states that existing traffic already makes it difficult to get out of the community and is dangerous to kids in the community.
Q&A Chat	
Joey King	- Will copies of PowerPoint presentation and recording will be shared?
Kirk Davis	- The most recent application states 91 parking truck stalls, which is inconsistent with number shown in the presentation (78).
Anonymous	- How will the project take impacts to traffic and pedestrian/bicyclist safety into consideration?

Leon	- Given the recent protests from the community, why is the City moving forward with the project? What measures will the City take to ensure the project doesn't add more to existing pollution in the area?
Joey King	- Was it stated in the beginning of the meeting that people could only speak once?
Kirk Davis	- Will the EIR recognize the designation of the project area as an environmental justice (EJ) community.
Anonymous	- Schools are nearby, please keep kids' safety in mind.
Anonymous	- Can we learn from the mistakes of the development on Atlantic/Artesia that contributes to bad traffic in the mornings and accidents at the intersection.
Hilda	- Please consider that we live in an urban forest area.