Draft Environmental Impact Report

SCH# 2025030498

Volume 2
Appendix A through B1

AIRPORT COMMERCE CENTER INDUSTRIAL PROJECT
by ACC Bakersfield JV, LLC.
(PP24405)

GPA No. 5, Map 81-35
ZCC No. 46, Map 81-35
PD No. 36, Map 81-35
NSV, Map 81-35

Kern County
Planning and Natural Resources Department
Bakersfield, CA

February 2026

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Kern County
Planning and Natural Resources Department
Bakersfield, CA

February 2026

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Appendices – Volume 2

NOTE TO REVIEWER OF ELECTRONIC FILES:

To assist you in reviewing this electronic document, "bookmarks" and/or "links" have been provided for easier navigation between sections. When available, bookmarks are located in the panel to the left. Links are highlighted in BLUE in the Table of Contents. Clicking on either the bookmarks or links will take you to the selected item. This document may consist of multiple linked PDF files. If saving this document to your computer, you must save all corresponding files to a directory on your hard drive to maintain the manner in which these PDF documents are linked.

Appendix A: Notice of Preparation

Appendix B: Air Quality, Greenhouse Gases, and Energy Analysis Report

Appendix A
Notice of Preparation

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Lorelei H. Oviatt, AICP, Director
2700 "M" Street, Suite 100
Bakersfield, CA 93301-2323
Phone: (661) 862-8600
Fax: (661) 862-8601 TTY Relay 1-800-735-2929
Email: planning@kerncounty.com
Web Address: http://kernplanning.com/

PLANNING AND NATURAL RESOURCES DEPARTMENT

Planning
Community Development
Administrative Operations

DATE: March 13, 2025

TO: See Attached Mailing List

FROM: Kern County Planning and Natural Resources Department
Attn: Nicole Menchaca
2700 "M" Street, Suite 100
Bakersfield, CA 93301
(661)862-8738;huiskenn@kerncounty.com

SUBJECT: NOTICE OF PREPARATION (NOP) OF A DRAFT ENVIRONMENTAL IMPACT REPORT (EIR) FOR THE AIRPORT COMMERCE CENTER INDUSTRIAL PROJECT BY ACC BAKERSFIELD JV, LLC

The Kern County Planning and Natural Resources Department as Lead Agency (per CEQA Guidelines Section 15062) has determined that preparation of an Environmental Impact Report (per CEQA Guidelines 15161) is necessary for the proposed project identified below. The Planning and Natural Resources Department solicits 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 may need to use the EIR prepared by our agency when considering your permit or other approval of the project.

You are invited to view the Initial Study/NOP and submit written comments regarding the scope and content of the environmental information in connection with the proposed project should you wish to do so. Due to the limits mandated by State law, your response must be received by **Friday, April 11, 2025, at 5:00 p.m**. Comments can be submitted to the Kern County Planning and Natural Resources Department at the address shown above or to huiskenn@kerncounty.com. A Scoping meeting will be held on **Wednesday, April 2, 2025, at 1:30 p.m**. at the address listed above.

PROJECT TITLE: Airport Commerce Center Industrial Project by ACC Bakersfield JV, LLC (PP24405); GPA No. 5, Map 81-35; ZCC No. 46, Map 81-35; PD No. 36, Map 81-35; ZV No. 7, Map 81-35; Nonsummary Vacation, Map 81-35.

DOCUMENT AVAILABILITY: The Notice of Preparation for the above referenced project is available for public review at the Planning and Natural Resources Department, which is located at 2700 "M" Street, Suite 100, Bakersfield, CA 93301, or it can be accessed on the Kern County Planning and Natural Resources Department website at: **https://kernplanning.com/environmental-doc/airport-commerce-center-industrial-project/**

PROJECT LOCATION: The project site is located on the north side of Merle Haggard Drive between Airport Drive and Landings Way in the Oildale area of unincorporated Bakersfield in Kern County within the Metropolitan Bakersfield General Plan (unincorporated Planning Area). The City of Shafter lies approximately 3 miles west of the project site. The project site is situated approximately 1.5 miles east of State Route (SR) 65 and approximately 2.2 miles east of State Route (SR) 99. Regional access to the project site is available from SR-99 via the Seventh Standard Road exit. The project is within the Mount Diablo Base and Meridian (MDB&M).

PROJECT DESCRIPTION: The Airport Commerce Center Industrial Project is a proposal by ACC Bakersfield JV, LLC for the construction and operation of an industrial warehouse facility with associated

quick-serve restaurants. The proposed project would include the construction of four single-story warehouses totaling approximately 1,505,440 square-feet (including 150,544 square-feet for dedicated office space), two single-story quick-serve restaurants totaling 9,410 square-feet, and related site improvements. The proposed project is located on six (6) parcels totaling approximately 109 acres (Assessor's Parcel Numbers (APN's), 483-040-32, 483-040-33, 483-040-42, 483-040-43, 483-040-45, and 483-040-46) of privately owned land located in the Oildale area of unincorporated Bakersfield in central Kern County, California. Implementation of the project as proposed includes the following requests:

a. General Plan Amendment No. 5, Map 81-35 of the Metropolitan Bakersfield General Plan map code designation GC (General Commercial) to SI (Service Industrial) on an approximate 13.76 acres.

b. Zone Classification Change No. 46, Map 81-35 from M-1 PD H (Light Industrial – Precise Development Combining – Airport Approach Height Combining) to M-2 PD H (Medium Industrial – Precise Development Combining - Airport Approach Height Combining), or more restrictive district, on an approximate 13.76 acres and from FPP (Floodplain Primary) to M-2 PD H (Medium Industrial – Precise Development Combining - Airport Approach Height Combining), or more restrictive district, on an approximate 8.56-acres.

c. Precise Development Plan No. 36, Map 81-35 to allow for the construction and operation of an industrial warehouse facility with associated quick serve restaurants pursuant to Sections 19.38.020.E and 19.38.020.D.3 of the Kern County Zoning Ordinance on an approximate 109 combined acres over six parcels in the M-2 PD H (Medium Industrial – Precise Development Combining – Airport Approach Height Combining) District.

d. Zone Variance No. 7, Map 81-35 to allow a maximum of 60-foot-tall structures where 35-foot-tall structures are the maximum allowed height.

e. Nonsummary Vacation, Map 81-35 to vacate two (2) drainage easements located on the project site totaling approximately 10.24 acres.

Signature: Nicole Menchaca
Name: Nicole Menchaca, Supervising Planner

Airport Commerce Center Industrial Project NOP (PP24405)

APN List and Agencies

491 472 08 00 5
BENOR AARON & RENA
18236 HERBOLD ST
NORTHRIDGE CA 91325

483 010 27 00 3
CALIFORNIA RESOURCES PETROLEUM CORPORATION
27200 TOURNEY RD STE 200
SANTA CLARITA CA 91355-4910

483 040 03 00 2
CHEMTURA CORP
111 PARKWEST DR
PITTSBURGH PA 15275-1112

483 040 11 00 5
GOEHRING GIDEON W & ERNA R TR
1741 NW UTAH DR
ROSEBURG OR 97471

483 230 13 00 6
JONES FAMILY TRUST
16219 BRIMHALL RD
BAKERSFIELD CA 93314

483 230 11 00 0
KERN COUNTY ASSOCIATES LP
200 SPECTRUM DR STE 1250
IRVINE CA 92618

492 480 34 00 6
MCD 7 PROP LLC
P O BOX 80667
BAKERSFIELD CA 93380-0667

483 230 03 00 7
OLD DOMINION FREIGHT LINE INC
500 OLD DOMINION WY
THOMASVILLE NC 27360

483 030 22 00 4
PPL INVS LLC
6122 POTENZA LN
BAKERSFIELD CA 93308

483 030 21 00 1
ANSOLABEHERE FAMILY TRUST 2022
PO BOX 82132
BAKERSFIELD CA 93380-2132

483 030 11 00 2
BJR INC
17840 N WRANGLER RD
RATHDRUM ID 83858

483 230 15 00 2
CF HIPPOLYTA BAK LLC
PO BOX 80416
SEATTLE WA 98108-0416

483 030 23 00 7
CLEVELAND BILLY J & KAREN S
14937 HENDERSON AV
BAKERSFIELD CA 93314

483 030 03 00 9
GORDON CARROLL & JUDITH RYAN
7008 SHAFTER RD
BAKERSFIELD CA 93313

483 040 32 00 6
ACC BAKERSFIELD JV LLC
8939 S SEPULVEDA BL STE 102
LOS ANGELES CA 90045

491 590 01 00 5
KFT HOLDINGS LLC
136 ALLEN RD # 100
BAKERSFIELD CA 93314-3710

483 040 12 00 8
MUNCY DAN & LEE B
6648 COPPER ANN DR
SPARKS NV 89436

483 030 24 00 0
ORTIZ RAYMOND JR
10009 TIMELESS ROSE CT
BAKERSFIELD CA 93311-3730

483 030 28 00 2
RYAN FAMILY TRUST
1712 W BEVERLY BL STE 201
MONTEBELLO CA 90640

483 230 02 00 4
ARC WEST LLC
5301 OFFICE PARK DR STE 325
BAKERSFIELD CA 93309

483 230 07 00 9
C & C PROP INC
9201 CAMINO MEDIA # 120
BAKERSFIELD CA 93311-1339

492 480 38 00 8
CH INV GROUP LLC
3701 GULFSTREAM LN
BAKERSFIELD CA 93308

483 040 13 00 1
COUNTY OF KERN
1115 TRUXTUN AV
BAKERSFIELD CA 93301

483 030 20 00 8
HANNAH ANTHONY & DEBORAH HUBER
14510 WAYNE LEE CT
BAKERSFIELD CA 93314-8398

483 020 22 00 1
KEN SMALL CONSTRUCTION LTD
6205 DISTRICT BL
BAKERSFIELD CA 93313-2141

492 480 22 00 1
KUSA PROP LLC
555 STATE RD
BENSALEM PA 19020

491 561 01 00 3
NORTHVIEW MEADOWS LLC
PO BOX 1188
SAN LUIS OBISPO CA 93406-1188

483 230 14 00 9
PF GLOBAL PROPERTY GROUP BAKERSFIELD INC
2901 LEISURE ISLAND WY
KNOXVILLE TN 37914

483 040 01 00 6
SAN PABLO BAY PIPELINE COMPANY LLC
370 17TH ST STE 3100
DENVER CO 80202-5631

483 040 29 00 8
SAN PABLO BAY PIPELINE
COMPANY LLC
1900 MAIN ST # 600
IRVINE CA 92614

483 040 15 00 7
SHELL CALIFORNIA PIPELINE CO
P O BOX 2099
HOUSTON TX 77252

492 480 10 00 6
SILVER WINGS REAL EST LLC
3500 SHELL ST
BAKERSFIELD CA 93308

483 040 44 00 1
SSA REAL EST HOLDINGS LLC
12003 MUKILTEO SPEEDWAY STE
101
MUKILTEO WA 98275

483 040 35 00 5
WITCO CORP
111 PARKWEST DR
PITTSBURGH PA 15275-1112

483 030 27 00 9
WOOD SUSAN E REVOCABLE
TRUST
5888 OHE ST
KAPAA HI 96746-9661

491 472 07 00 2
XIN KATHERINE REV TR
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BAKERSFIELD CA 93311

Bakersfield City Planning Dept
1715 Chester Avenue
Bakersfield, CA 93301

Bakersfield City Public Works Dept
1501 Truxtun Avenue
Bakersfield, CA 93301

U.S. Bureau of Land Management
Caliente/Bakersfield
35126 McMurtrey Avenue
Bakersfield, CA 93308

Federal Aviation Administration
Western Reg Office/
777 South Aviation Boulevard
Suite 150
El Segundo, CA 90245

Federal Communications Comm
18000 Studebaker Road, #660
Cerritos, CA 90701

Environmental Protection Agency
Region IX Office
75 Hawthorn Street
San Francisco, CA 94105

U.S. Dept of Agriculture/NRCS
5080 California Avenue, Ste 150
Bakersfield, CA 93309-0711

So. San Joaquin Valley Arch Info Ctr
California State University of Bkfd
9001 Stockdale Highway
Bakersfield, CA 93311

Caltrans/Dist 6
Planning/Land Bank Bldg.
P.O. Box 12616
Fresno, CA 93778

Caltrans/
Division of Aeronautics, MS #40
P.O. Box 942873
Sacramento, CA 94273-0001

State Dept of Conservation
Director's Office
715 "P" Street, MS 1900
Sacramento, CA 95814

State Dept of Conservation
Geologic Energy Management Division
11000 River Run Boulevard
Bakersfield, CA 93311

California Fish & Wildlife
1234 East Shaw Avenue
Fresno, CA 93710

California Regional Water Quality
Control Board/Central Valley Region
1685 E Street
Fresno, CA 93706-2020

State Dept of Toxic Substance Control
Environmental Protection Agency
1515 Tollhouse Road
Clovis, CA 93612

Cal Environmental Protection Agency/
Dept of Toxic Substances Control, Reg 1
Attn: Dave Kereazis, Permit Div - CEQA
8800 Cal Center Drive, 2nd Floor
Sacramento, CA 95826

Kern County Airports Department

Kern County Public Works Department/
Building & Development/Floodplain

Kern County Public Works Department/
Building & Development/Survey

Kern County
Env Health Services Department

Kern County Fire Dept (Put in FIRE BOX)
Regina Arriaga
Roxanne Routh
Jim Killam

Kern County Fire Dept
Aaron Duncan

Kern County Library/Beale
Local History Room

Kern County Library/Beale
Andie Sullivan

Kern County Sheriff's Dept
Administration

Kern County Public Works Department/
Building & Development/Development
Review

Kern County Public Works
Department/Operations &
Maintenance/Regulatory Monitoring &
Reporting

Kern County Public Works Department/
Building & Development/Code
Compliance

Standard School Dist
1200 North Chester Avenue
Oildale, CA 93308

Beardsley School Dist
1001 Roberts Lane
Bakersfield, CA 93308

Kern High School Dist
5801 Sundale Avenue
Bakersfield, CA 93309

Kern County Superintendent of Schools
Attention School District Facility Services
1300 - 17th Street
Bakersfield, CA 93301

Local Agency Formation Comm/LAFCO
5300 Lennox Avenue, Suite 303
Bakersfield, CA 93309

Oildale Mutual Water Co
P.O. Box 5638
Bakersfield, CA 93388

North of the River Muni Water Dist
P.O. Box 5638
Bakersfield, CA 93388-5638

Kern County Water Agency
3200 Rio Mirada Drive
Bakersfield, CA 93308

North of the River Rec & Parks Dist
3825 Riverlakes Dr.
Bakersfield, CA 93312

San Joaquin Valley
Air Pollution Control District
1990 East Gettysburg Avenue
Fresno, CA 93726

Golden Empire Transit
1830 Golden State Avenue
Bakersfield, CA 93301

Kern Mosquito Abatement Dist
4705 Allen Road
Bakersfield, CA 93314

Adams, Broadwell, Joseph & Cardozo
Attention: Janet M. Laurain
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080

AT&T California
OSP Engineering/Right-of-Way
4901 Ashe Road
Bakersfield, CA 93313

Center on Race, Poverty
& the Environment
5901 Christie Avenue, Suit 208
Emeryville, CA 94608

Center on Race, Poverty
& the Environmental/
CA Rural Legal Assistance Foundation
1012 Jefferson Street
Delano, CA 93215

Defenders of Wildlife
P.O. Box 401
Folsom, CA 95763

Native American Heritage Council
of Kern County
Attn: Gene Albitre
18169 Highway 155
Woody, CA 93287

~~Pacific Gas & Electric Co~~
~~Matt Coleman, Land Mgt~~
~~1918 "H" Street~~
~~Bakersfield, CA 93301-4319~~

Sierra Club/Kern Kaweah Chapter
P.O. Box 3357
Bakersfield, CA 93385

Southern California Gas Co
35118 McMurtrey Avenue
Bakersfield, CA 93308-9477

Southern California Gas Co
Transportation Dept
P.O. Box 513249
Los Angeles, CA 90051

Chumash Council of Bakersfield
2421 "O" Street
Bakersfield, CA 93301-2441

David Laughing Horse Robinson
P.O. Box 20849
Bakersfield, CA 93390

Kern Valley Indian Council
Attn: Robert Robinson, Chairperson
P.O. Box 401
Weldon, CA 93283

Kern Valley Indian Council
Historic Preservation Office
P.O. Box 401
Weldon, CA 93283

Santa Rosa Rancheria
Ruben Barrios, Chairperson
P.O. Box 8
Lemoore, CA 93245

Tejon Indian Tribe
Octavio Escobedo III, Chairman
P.O. Box 640
Arvin, CA 93203F

Kitanemuk & Yowlumne Tejon Indians
Chairperson
115 Radio Street
Bakersfield, CA 93305

Tubatulabals of Kern County
Attn: Robert Gomez, Chairperson
P.O. Box 833
Weldon, CA 93283

Tule River Indian Tribe
Neal Peyron, Chairperson
P.O. Box 589
Porterville, CA 93258

San Fernando Band of Mission Indians
Attn: John Valenzuela, Chairperson
P.O. Box 221838
Newhall, CA 91322

Carol Bender
13340 Smoke Creek Avenue
Bakersfield, CA 93314-9025

Kevin Johnston
2476 Buena Vista Avenue
Livermore, CA 94550

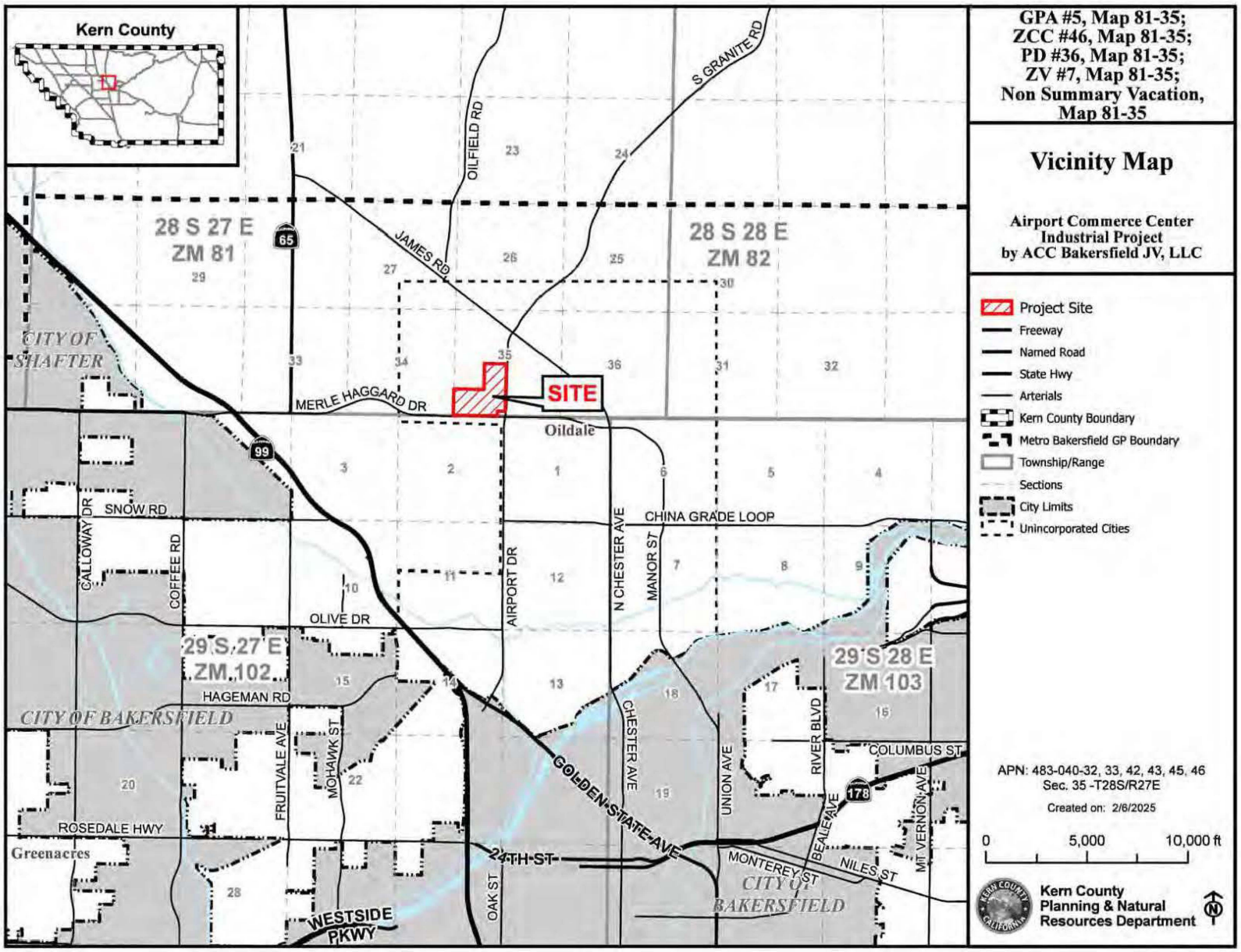
Leadership Counsel for Justice &
Accountability
85350 Bagdad Ave.
Coachella, CA 92236

LIUNA
2201 "H" Street
Bakersfield, CA 93301

A E Corporation
Planning Department
901 Via Piemonte, 5th Floor
Ontario, CA 91764

Lozeau Drury LLP
1939 Harrison Street, Suite 150
Oakland, CA 94612

Meadows Field Airport
3701 Wings Way, Suite 300
Bakersfield, CA 93308



GPA #5, Map 81-35;
ZCC #46, Map 81-35;
PD #36, Map 81-35;
ZV #7, Map 81-35;
Non Summary Vacation, Map 81-35

Vicinity Map

Airport Commerce Center Industrial Project by ACC Bakersfield JV, LLC

- Project Site
- Freeway
- Named Road
- State Hwy
- Arterials
- Kern County Boundary
- Metro Bakersfield GP Boundary
- Township/Range
- Sections
- City Limits
- Unincorporated Cities

APN: 483-040-32, 33, 42, 43, 45, 46
Sec. 35 -T28S/R27E

Created on: 2/6/2025

0 5,000 10,000 ft

Kern County
Planning & Natural
Resources Department

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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: Airport Commerce Center Industrial Project by ACC Bakersfield JV, LLC

Lead Agency: Kern County Planning and Natural Resources Department — Contact Person: Nicole Menchaca

Mailing Address: 2700 "M" Street Suite 100 — Phone: (661) 862-8738

City: Bakersfield — Zip: 93301 — County: Kern

Project Location: County: Kern — City/Nearest Community: Oildale

Cross Streets: Merle Haggard Dr. & Airport Dr. — Zip Code: 93308

Lat. / Long.: 35° 26' 38.76" N, 119° 2'' 39.91" W — Total Acres: 109

Assessor's Parcel No.: Multiple — Section: 35 — Twp.: 28S — Range: 27E — Base: MDB&M

Within 2 Miles: State Hwy #: 99 — Waterways: N/A

Airports: Meadows Field — Railways: Union Pacific — Schools: Multiple

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Document Type:

CEQA: ☒ NOP ☐ Early Cons ☐ Neg Dec ☐ Mit Neg Dec ☐ Draft EIR ☐ Supplement/Subsequent EIR (Prior SCH No.) _____ Other _____

NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI

Other: ☐ Joint Document ☐ Final Document ☐ Other _____

Local Action Type:

☐ General Plan Update ☒ General Plan Amendment ☐ General Plan Element ☐ Community Plan

☐ Specific Plan ☐ Master Plan ☐ Planned Unit Development ☒ Site Plan

☒ Rezone ☐ Prezone ☐ Use Permit ☐ Land Division (Subdivision, etc.)

☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☐ Other _____

Development Type:

☐ Residential: Units _____ Acres _____

☐ Office: Sq.ft. _____ Acres _____ Employees _____

☐ Commercial: Sq.ft. _____ Acres _____ Employees _____

☒ Industrial: Sq.ft. 1,505,440 Acres 109 Employees 532

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

Present Land Use/Zoning/General Plan Designation:

Undeveloped Land / *Zoning:* M-2 PD H (Medium Industrial – Precise Development Combining – Airport Approach Height Combining), M-1 PD H – Light Industrial Precise Development Combining – Airport Approach Height Combining, FPP (Floodplain Primary) / SI = Service Industrial and GC = General Commercial

---

Project Description:

The Airport Commerce Center Industrial Project is a proposal by ACC Bakersfield JV, LLC for the construction and operation of an industrial warehouse facility with associated quick-serve restaurants. The proposed project would include the construction of four single-story warehouses totaling approximately 1,505,440 square-feet (including 150,544 square-feet for dedicated office space), two single-story quick-serve restaurants totaling 9,410 square-feet, and related site improvements. The proposed project is located on six (6) parcels totaling approximately 109 acres (Assessor's Parcel Numbers (APN's), 483-040-32, 483-040-33, 483-040-42, 483-040-43, 483-040-45, and 483-040-46) of privately owned land located in the Oildale area of unincorporated Bakersfield in central Kern County, California.

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	_____	Office of Emergency Services
_____	Boating & Waterways, Department of	_____	Office of Historic Preservation
_____	California Highway Patrol	_____	Office of Public School Construction
_____	CalFire	_____	Parks & Recreation
S	Caltrans District # 6	_____	Pesticide Regulation, Department of
S	Caltrans Division of Aeronautics	_____	Public Utilities Commission
_____	Caltrans Planning (Headquarters)	S	Regional WQCB # Central
_____	Central Valley Flood Protection Board	_____	Resources Agency
_____	Coachella Valley Mountains Conservancy	_____	S.F. Bay Conservation & Development Commission
_____	Coastal Commission	_____	San Gabriel & Lower L.A. Rivers and Mtns Conservancy
_____	Colorado River Board	_____	San Joaquin River Conservancy
S	Conservation, Department of	_____	Santa Monica Mountains Conservancy
_____	Corrections, Department of	_____	State Lands Commission
_____	Delta Protection Commission	_____	SWRCB: Clean Water Grants
_____	Education, Department of	_____	SWRCB: Water Quality
_____	Energy Commission	_____	SWRCB: Water Rights
S	Fish & Game Region # Fresno	_____	Tahoe Regional Planning Agency
_____	Food & Agriculture, Department of	S	Toxic Substances Control, Department of
_____	General Services, Department of	_____	Water Resources, Department of
_____	Health Services, Department of		
_____	Housing & Community Development	_____	Other _____
_____	Integrated Waste Management Board	_____	Other _____
S	Native American Heritage Commission		

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

Starting Date March 13, 2025 Ending Date April 11, 2025

Lead Agency (Complete if applicable):

Consulting Firm: _____
Address: _____
City/State/Zip: _____
Contact: _____
Phone: _____

Applicant: ACC Bakersfield JV, LLC
Address: 1460 Jefferson Street
City/State/Zip: San Francisco, CA 94123
Phone 831-277-7757

Signature of Lead Agency Representative: Nicole Menchaca **Date:** 03/13/2025

Nicole Menchaca, Supervising Planner

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

NOTICE OF PREPARATION

Airport Commerce Center Industrial Project
by ACC Bakersfield JV, LLC

General Plan Amendment No. 5, Map 81-35
Zone Change No. 46, Map 81-35
Precise Development Plan No. 36, Map 81-35
Zone Variance No. 7, Map 81-35
Nonsummary Vacation, Map 81-35

PLN23-00829
(PP24405)

LEAD AGENCY:

Kern County Planning and Natural Resources Department
2700 M Street, Suite 100
Bakersfield, CA 93301-2370

Contact: Nicole Menchaca, Supervising Planner
(661) 862-8738
huiskenn@kerncounty.com

March 2025

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INTRODUCTION

Pursuant to the California Environmental Quality Act (CEQA), the Kern County Planning and Natural Resources Department (County) will initiate the preparation of an Environmental Impact Report (EIR) for the Airport Commerce Center Industrial Project by ACC Bakersfield JV, LLC in the unincorporated area of the valley portion of Kern County, California in the Metropolitan Bakersfield area.

1. Project Description

1.1. Project Location

The Airport Commerce Center Industrial Project (proposed project) is a proposal by ACC Bakersfield JV, LLC (project proponent) for the construction and operation of an industrial warehouse facility with associated quick-serve restaurants. The proposed project would include the construction of four single-story warehouses totaling approximately 1,505,440 square-feet (including 150,544 square-feet for dedicated office space), two single-story quick-serve restaurants totaling 9,410 square-feet, and related site improvements. The proposed project is located on six (6) parcels totaling approximately 109 acres (Assessor's Parcel Numbers (APN's), 483-040-32, 483-040-33, 483-040-42, 483-040-43, 483-040-45, and 483-040-46) of privately owned land located in the Oildale area of unincorporated Bakersfield in central Kern County, California as shown in **Figure 1**, *Vicinity Map.* The project site is bounded by Petrol Road (north), Airport Drive (east), Merle Haggard Drive (south), and Landings Way (west) as shown in **Figure 2**, *Aerial Landscape.*

The project site is located within the Metropolitan Bakersfield General Plan (unincorporated Planning Area). The City of Shafter lies approximately 3 miles west of the project site. The project site is situated approximately 1.5 miles east of State Route (SR) 65 and approximately 2.2 miles east of State Route (SR) 99. Regional access to the project site is available from SR-99 via the Seventh Standard Road exit. Local access to the project site is available from Airport Drive and Merle Haggard Drive.

The project vicinity is characterized by industrial, commercial, and residential uses including logistics facilities, industrial manufacturing and storage, housing tracts, and vacant land. Wingland Elementary School is located approximately 1.15 miles southeast of the project site at Douglas Street and Diane Drive and North High School is located approximately 1 mile southeast of the project site at West China Grade Loop and McCray Street.

The project site is located on the *Oildale, California* United States Geological Survey (USGS) 7.5-minute Topographic Quadrangle Map, Township 28S South, Range 27 East, Section 2. **Figures 6a - 6c**, *Proposed Precise Development Plan* depicts the proposed project and the project boundaries.

1.2. Environmental Setting

The project site is situated in the southern end of the San Joaquin Valley, in unincorporated Kern County. Kern County and the City of Bakersfield have jointly prepared and separately adopted a general plan for an unincorporated planning area known as the Metropolitan Bakersfield General Plan (MBGP). Kern County is California's third largest county in land area and encompasses approximately 8,202 square miles. The County's geography includes, among others, mountainous areas, agricultural lands, and deserts. According to the California Department of Finance's 2024 Population estimates, Kern County's current estimated

population is 910,300 residents with Bakersfield as the largest city in the County with a current estimated population of 411,109 residents.

The project site is relatively flat with an elevation of approximately 175 feet above mean sea level (AMSL). The site consists of vacant undeveloped land with internal dirt paths. The project site is bisected by a floodplain area which runs from the northeast corner of the project site to the southwest corner of the project site.

Land uses within the region and the immediate area of the site primarily consist of industrial, commercial, and residential uses. Land uses surrounding the site include the following:

North – Petrol Road and a tank farm are located to the north of the project site. The project has an existing tank farm on the northern half of the western portion of the site.

South – Merle Haggard Drive and vacant undeveloped land are located south of the project site.

West – Landings Way and an Amazon warehouse/logistics facility are located to the west of the majority of the project site. An existing oil tank farm is located to the west of the northern portion of the site.

East – Airport Drive and vacant undeveloped land are located to the east of the project site.

Table 1, *Project Site and Surrounding Land Uses,* **Figure 4,** *Existing General Plan Map,* and **Figure 5,** *Existing Zoning Classifications,* presents the existing land uses, Metropolitan Bakersfield General Plan designations, and Zoning classification for the project site and surrounding area. The outlying project vicinity includes single- and multi-family residences, mostly east of the project site. The nearest residence is approximately 627 feet directly southeast of the project site (but over 1,000 feet from the closest proposed industrial building). The nearest existing schools include North High School located approximately 1 mile southeast of the project site, Wingland Elementary School located approximately 1.15 miles southeast of the project site, Lifehouse Christian Academy located approximately 1.35 miles southeast of the project site, Highland Elementary School located approximately 1.58 miles southeast of the project site, St. John Vianney Academy located approximately 1.80 miles southeast of the project site, North Beardsley Child Development Center located approximately 1.80 miles south of the project site, Standard Elementary School located approximately 1.95 miles southeast of the project site, Standard Middle School located approximately 2.05 miles southeast of the project site, Legacy Christian Academy is located approximately 2.13 miles southwest of the project site, Olive Knolls Christian School located approximately 2.30 miles southwest of the project site, Beardsley Elementary School located approximately 2.30 miles south of the project site, Beardsley Junior High located approximately 2.35 miles south of the project site, and San Lauren Elementary School is located approximately 3 miles southwest of the project site.

Table 1. Project Site and Surrounding Land Uses

	Existing Land Use	Existing Map Code Designation	Existing Zone Classification
Project Site	Vacant	Service Industrial (SI), General Commercial (GC)	Medium Industrial Precise Development Airport Approach Height Combining District (M-2 PD H), Light Industrial Precise Development Airport Approach Height Combining District (M-1 PD H) and Floodplain Primary District (FPP)
North	Tank Farm and vacant land	Service Industrial (SI)	Limited Agriculture (A-1) and Medium Industrial Precise Development Airport Approach Height Combining District (M-2 PD H)
East	Vacant	Service Industrial (SI)	Natural Resource 20 acres (NR (20)) and General Commercial Precise Development Combining District (C-2 PD)
South	Vacant	Service Industrial (SI), General Commercial (GC)	Medium Industrial Precise Development Airport Approach Height Combining District (M-2 PD H) and Light Industrial Precise Development Airport Approach Height Combining District (M-1 PD H)
West	Logistics Facility and vacant land	Service Industrial (SI)	Medium Industrial Precise Development Airport Approach Height Combining District (M-2 PD H)

Through review of the Kern County Airport Land Use Compatibility plan (ALUCP), the proposed project is located within the Sphere of Influence (SOI) for the Meadows Field Airport. The Meadows Field Airport is located approximately 0.3 miles southwest of the project. The project site is located within the Airport Approach Height Combining District and as shown on **Figure 3,** *Airport Land Use Compatibility Plan Map*, is designated in the "C" Zone. The closest public use runway has a length of approximately 2 miles, with distance of approximately 0.7 miles from the nearest point of the runway to the project site.

The project site is not located within an area that is designated by the California Department of Conservation (CDC) as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. No lands within the project boundary are subject to a Williamson Act Land Use contract. The proposed project site is not part

of an Agricultural Preserve. In addition, the project site is not located within the boundaries of an adopted Habitat Conservation Plan.

1.3. Project Description

The proposed project would include the development of four single-story warehouse facilities totaling approximately 1,505,440 square-feet (including 150,544 square-feet for dedicated office space), two quick-serve restaurants totaling approximately 9,410 square-feet, and associated improvements on approximately 109 acres of privately owned land in the central portion of unincorporated Kern County.

Implementation of the project as proposed include the following requests:

- Amendment to the Metropolitan Bakersfield General Plan Land Use Element (GPA No. 5, Map 81-35) from Map Code GC (General Commercial) to SI (Service Industrial) on an approximate 13.76-acre parcel of the 109-acre project site;
- Change in zone classification (ZCC No. 46, Map 81-35):
    - From M-1 PD H (Light Industrial – Precise Development Combining – Airport Approach Height Combining) to M-2 PD H (Medium Industrial – Precise Development Combining – Airport Approach Height Combining), or more restrictive district, on an approximate 13.76-acre portion of the 109-acre project site; and
    - From FPP (Floodplain Primary) to M-2 PD H (Medium Industrial – Precise Development Combining – Airport Approach Height Combining), or more restrictive district, on an approximate 8.56-acre portion of the 109-acre project site;
- Precise Development Plan (PD No. 36, Map 81-35) to facilitate the construction of four (4) industrial warehouse buildings totaling approximately 1,505,440 square-feet including 625,446 square-feet of warehousing, 393,624 square-feet of cold storage, 335,826 square-feet of industrial manufacturing or assembly for a food/beverage company, 150,544 square feet of office space, and two (2) associated quick-serve restaurants totaling approximately 9,410 square-feet on approximately 109 acres over six (6) parcels pursuant to Sections 19.38.020.D.1, 19.38.020.D.4, and 19.38.020.E.2;
- Zone Variance (ZV No. 7, Map 81-35) to allow a maximum of 60-foot-tall structures where 35-foot-tall structures are the maximum allowed height; and
- Nonsummary Vacation, Map 81-35 to vacate two (2) drainage easements located on the project site totaling approximately 10.24 acres.

The proposed project site lies within the boundaries of the Metropolitan Bakersfield General Plan (MBGP). The existing MBGP designations are listed in **Table 2**, below, and depicted in **Figure 4**, *Existing General Plan Map*. The entire project site is also subject to the provisions of the Kern County Zoning Ordinance and is zoned as specified in **Table 2**, below, and depicted in **Figure 5**, *Existing Zoning Classifications*.

Table 2: Project Assessor's Parcel Number, Existing Land Uses, and Acreages

Parcel	APN	Zone Map	Existing Map Code Designation	Existing Zoning	Acres
1.	483-040-32	81-35	SI	M-2 PD H, FPP	14.45
2.	483-040-33	81-35	SI	M-2 PD H, FPP	17.95
3.	483-040-42	81-35	SI	M-2 PD H, FPP	16.68
4.	483-040-43	81-35	SI	M-2 PD H, FPP	23.44
5.	483-040-45	81-35	GC	M-1 PD H	13.76
6.	483-040-46	81-35	SI	M-2 PD H, FPP	22.46

Metropolitan Bakersfield General Plan (MBGP) Map Code Designation:
SI (Service Industrial), GC (General Commercial)
Kern County Zoning District:
M-1 PD H (Light Industrial, Precise Development Combining Airport Approach Height Combining), M-2 PD H (Medium Industrial, Precise Development Combining, Airport Approach Height Combining), FPP (Floodplain Primary)

1.4 Project Facilities, Construction Activities, and Operations

Project Facilities

The overall proposed development consists of four single-story warehouses totaling approximately 1,505,440 square feet (including 150,544 square-feet for dedicated office space), two single-story quick-serve restaurants totaling 9,410 square-feet, and related site improvements. The primary function of the large industrial buildings will be industrial warehouse storage, industrial manufacturing/assembly to facilitate the manufacturing of food or beverage products, and industrial warehouse storage including cold storage, as shown in **Figures 6a - 6c**, *Proposed PD Plan*. **Table 3**, *Project Summary,* provides a project summary of the proposed project.

Table 3: Project Summary

Acreage	Proposed End Use	Maximum Building Footprint	Maximum Building Height	Truck Dock Parking Spaces	Automobile Parking Spaces	Truck Trailer Spaces
109 acres	Approximately 1,514,850 square feet offices, warehouse, cold storage, assembly/manufacturing and quick serve restaurants	1,514,850	+/- 60 feet	225	2,001 stalls	401 stalls

Source: Airport Commerce Center Industrial Project, February 2025.

The warehouse buildings will be primarily tilt-up panel construction of architecturally enhanced concrete panels with a maximum height of 60' above ground level. Additional design elements such as refinement and articulation of the building corners would be included in the construction. The quick-serve restaurants would be wood frame or metal construction with a maximum height of 20 feet above ground level. The building designs and selected colors would comply with all required County ordinances and development standards and meet the standards for all California Green Building Standards Code (Title 24 requirements).

The warehouses would provide dock-high doors which would be utilized by delivery trucks. **Table 4**, *Truck Door Summary*, is a summary of the assignment of doors by type.

Table 4: Truck Door Summary

Type	Doors (approximately)
Dock-High Doors	215
Grade-Level Doors	10
Total	225

Source: Airport Commerce Center Industrial Project, February 2025.

Parking

Table 5, *Parking Summary*, is a summary of the assignment of parking spaces by type.

Table 5. Parking Summary

Type	Stalls (approximately)
Automobile	2,001
Truck Trailer	401
Accessible	46
Electric Vehicle Charging Stations (EVCS)	102

Source: Airport Commerce Center Industrial Project, February 2025.

Vehicular Access and Circulation

The proposed project would include off-site improvements along Airport Drive, Merle Haggard Drive, Landings Way, and Petrol Road. Such improvements would be necessary to meet applicable Kern County Public Works Department development standards.

The existing roads would be improved with new pavement, curb and gutter, and sidewalk. Additionally, signing and markings would be constructed for the new pavement delineations.

Landscaping

The proposed project would include approximately 878,123 square feet (20.2 acres) of landscaping and low-flow irrigation, which would consist primarily of drought tolerant plants. Islands with canopy trees would be provided to reduce heat. Landscaping would also be utilized to provide visual screening where needed. Landscaping would exceed the 5 percent landscaping requirement of Section 19.86.060 of the Kern County Zoning Ordinance. There are no existing trees on-site, and therefore no trees would be required to be removed.

Lighting

The proposed project would operate 24 hours a day, 7 days a week as an industrial warehouse facility. Therefore, lighting would be designed to maximize employee safety and security while complying with County standards to confine light spread within the project site. Proposed lighting would adhere to the requirements of Chapter 19.81 Outdoor Lighting “Dark Skies Ordinance” of the Kern County Municipal

Code, which promotes the reduction of unnecessary light and glare, the reduction of light spillover onto adjacent properties, and energy conservation through the reduction of excessive or unwanted outdoor lighting. Lighting would be located throughout the proposed parking areas.

Construction Activities

Schedule and Workforce

For the purposes of this environmental analysis, the following construction schedule was assumed to last approximately 27 months with construction occurring in overlapping phases. Site preparation and grading would be encompassed within this 27-month period. Site preparation, grading and beginning of construction for Building 4 is planned to start construction in March of 2026 and conclude in September 2027. Construction of Buildings 1 and 2 would begin in July 2026 and conclude in September 2027. Construction of Building 3 would start in March 2027 and conclude in May 2028. Construction of off-site improvements would start in March 2026 and conclude in September 2027. Construction of the quick-serve restaurants would start in December 2025 and conclude in September 2027. The project proponent expects the project to be operational in May 2028.

Construction would primarily occur during daylight hours, between 7:00 a.m. and 8:00 p.m., 7 days per week, as required to meet the construction schedule. Additional hours may be necessary to facilitate the schedule. Any construction work performed outside of the normal work schedule would be coordinated with the appropriate agencies and would conform to the MBGP and the Kern County Noise Ordinance (Chapter 8.36).

The on-site construction workforce would consist of up to 100 individuals; however, the average daily workforce would vary depending upon the stage in construction. The average daily workforce would include construction, supervisory, support, and construction management personnel on-site during construction. It is anticipated that the construction workforce would commute to the project site each day from local communities and report to the designated construction staging yards prior to the beginning of each workday. Parking for construction personnel would be provided on-site. Portable toilets would be used and would be maintained by a private off-site company during the construction period.

Construction Activities and Equipment

Construction activities would consist of site preparation, grading, building construction, paving, and architectural coating. Typical equipment associated with these construction activities will be used.

Construction Water Use and Wastewater

During construction of the proposed project, water would be required for common construction-related purposes, including but not limited to dust suppression, soil compaction, and grading. Dust-control water may be used for ingress and egress of on-site construction vehicle equipment traffic and for the construction of the warehouse infrastructure. A sanitary water supply would not be required during construction, because restroom facilities would be provided by portable units to be serviced by licensed providers.

Solid and Non-hazardous Waste Disposal

During construction, the building contractor would arrange to have trash, construction recycling, and regular recycling bins delivered to the site in accordance with Kern County Building Code requirements

and guidelines. During construction, every effort would be made to minimize packaging and construction waste.

Construction recycling, regular recycling, and non-recyclable trash would be regularly picked up during the construction period.

Hazards and Hazardous Materials Compliance

The hazardous materials used for construction would be typical of most construction projects of this type. Materials would include small quantities of gasoline, diesel fuel, oils, lubricants, solvents, detergents, degreasers, paints, ethylene glycol, dust palliative, herbicides, and welding materials/supplies. A hazardous materials business plan would be provided to the Kern County Environmental Health Services Division/Hazardous Materials Section. The hazardous materials business plan would include a complete list of all materials used on-site and information regarding how the materials would be transported and in what form they would be used. This information would be recorded to maintain safety and prevent possible environmental contamination or worker exposure. During the project construction, safety data sheets for all applicable materials present at the site would be made readily available to on-site personnel.

To ensure minimum exposure of construction workers to hazardous materials (e.g., construction-related fuels and paints) and other hazardous materials, construction activities would comply with applicable worker protection laws and regulations, including the Occupational Safety and Health Act (OSHA), Title 9 of the Code of Federal Regulations, and Title 8 of the California Code of Regulations. The construction contractor selected for the project would be responsible for ensuring that construction workers are trained in accordance with local, state, and federal requirements for handling hazardous materials.

Operations

The proposed facility would operate 24 hours a day, 365 days a year and typically consist of multiple shifts rotating throughout the day and night. The facility would employ approximately 532 employees over the course of the shifts. Once operational, the proposed project would utilize standard equipment such as electric forklifts and pallet jacks.

Vehicular Access and Circulation

The proposed project would generate approximately 823 daily truck trips. Ingress to the proposed project would be taken from three driveway entrances off of Airport Drive, three off of Merle Haggard Drive, one off of Landings Way and one off of Petrol Road.

Utilities and Infrastructure

The proposed project would be served with potable water provided by the Oildale Mutual Water Company. Service laterals would be extended from an existing water line located within Merle Haggard Drive.

The proposed project would be served by the North of River Sanitary District with service laterals extended to the project site from existing sewer main within Merle Haggard Drive. Electricity service would be provided by PG&E. Service laterals would be extended to the project site from existing utility facilities along the project site. No natural gas is proposed. The project structures would be all electrically operated.

The proposed project would construct four detention basins totaling 425,033 square-feet located throughout the project site as demonstrated in *Figure 6c, Proposed Precise Development Plan - Landscaping.* The proposed project would install an on-site storm drain system consisting of ribbon gutters, catch basin inlets, and underground pipes. Runoff would be directed toward underground infiltration basins located within the parking areas around the site. The proposed project would be required to retain the stormwater per Kern County's drainage requirements and all other applicable standards.

Solid and Non-hazardous Waste Disposal

The proposed project would produce a small amount of waste associated with maintenance activities, which could include typical refuse generated by office and warehouse uses. Most of these materials would be collected and delivered back to the manufacturer or to recyclers. Nonrecyclable waste would be placed in covered dumpsters and removed on a regular basis by a certified waste-handling contractor for disposal at a Class III landfill. The closest Class III municipal landfill is the Bena Sanitary Landfill.

Hazards and Hazardous Materials Compliance

The proposed project would produce a small amount of hazardous waste associated with maintenance activities, which could include paint, solvents, cleaners, and waste oil. Workers would be trained to properly identify and handle all hazardous wastes. Fuels and lubricants used in operations would be subject to the Spill Prevention, Containment, and Countermeasure Plan to be prepared for the proposed project.

Hazardous waste would be either recycled or disposed of at a permitted and licensed treatment and/or disposal facility. All hazardous waste shipped off-site for recycling or disposal would be transported by a licensed and permitted hazardous waste hauler and disposed of at an approved location.

1.5. Project Objectives

State CEQA Guidelines Section 15124(b) requires that a project description include a clearly written statement of objectives. The statement of objectives should include the underlying purpose of the project and may discuss the project benefits. The following are the applicant objectives for the proposed project:

- Develop state of the art warehouse and distribution facilities near major transportation corridor.
- Meet regional demand for Class A industrial facilities which address local traffic patterns and needs.
- Develop a visually appealing industrial project that is consistent with the provisions of the Kern County Zoning Ordinance, Land Division Ordinance, and Development Standards.
- Promote land use compatibility with, and in proximity to, adjacent airport related uses by developing a warehouse and distribution facility.
- Positively contribute to the local economy through new capital investment, the creation of new employment opportunities, expansion of the tax base, economic growth and development, and payment of development fees.
- Site an industrial project in a location consistent with current and future market demands which minimizes conflicts with surrounding uses.

1.6. Proposed Discretionary Actions/Required Approvals

The Kern County Planning and Natural Resources Department as the CEQA Lead Agency (per CEQA Guidelines Section 15052) has discretionary responsibility for the Airport Commerce Center Industrial Project owned by ACC Bakersfield JV, LLC. Implementation of this project may require the project proponent to obtain discretionary and ministerial permits/approvals. These discretionary and ministerial permits/approvals include but are not limited to:

- **State**
    - Central Valley Regional Water Quality Control Board (RWQCB)
        - National Pollution Discharge Elimination System (NPDES) Construction General Permit
        - General Construction Stormwater Permit (Preparation of a SWPPP)
    - California Department of Transportation (Caltrans)
        - Right-of-Way Encroachment Permit (if required)
        - Permit for Transport of Oversized Loads (if required)
- **Local**
    - Kern County
        - Certification of Final Environmental Impact Report
        - Adoption of 15091 Findings of Fact and 15093 Statement of Overriding Considerations
        - Adoption of Mitigation Monitoring and Reporting Program
        - Approval of General Plan Amendment
        - Approval of Zone Change
        - Approval of Precise Development Plan
        - Approval of Zone Variance
        - Approval of Kern County Grading and Building Permits
        - Approval of Kern County Encroachment Permits
        - Approval of Fire Safety Plan
    - San Joaquin Valley Air Pollution Control District
        - Authority to Construct (ATC)
        - Construction Fugitive Dust Control Plan
        - Permit to Operate (PTO)

- Indirect Source Rule and Voluntary Emission Reduction Agreement
- Other permits as required

The preceding discretionary actions/approvals are potentially required and do not necessarily represent a comprehensive list of all possible discretionary permits/approvals required. Other additional permits or approvals from responsible agencies may be required for the proposed project.

Figure 1 – Vicinity Map

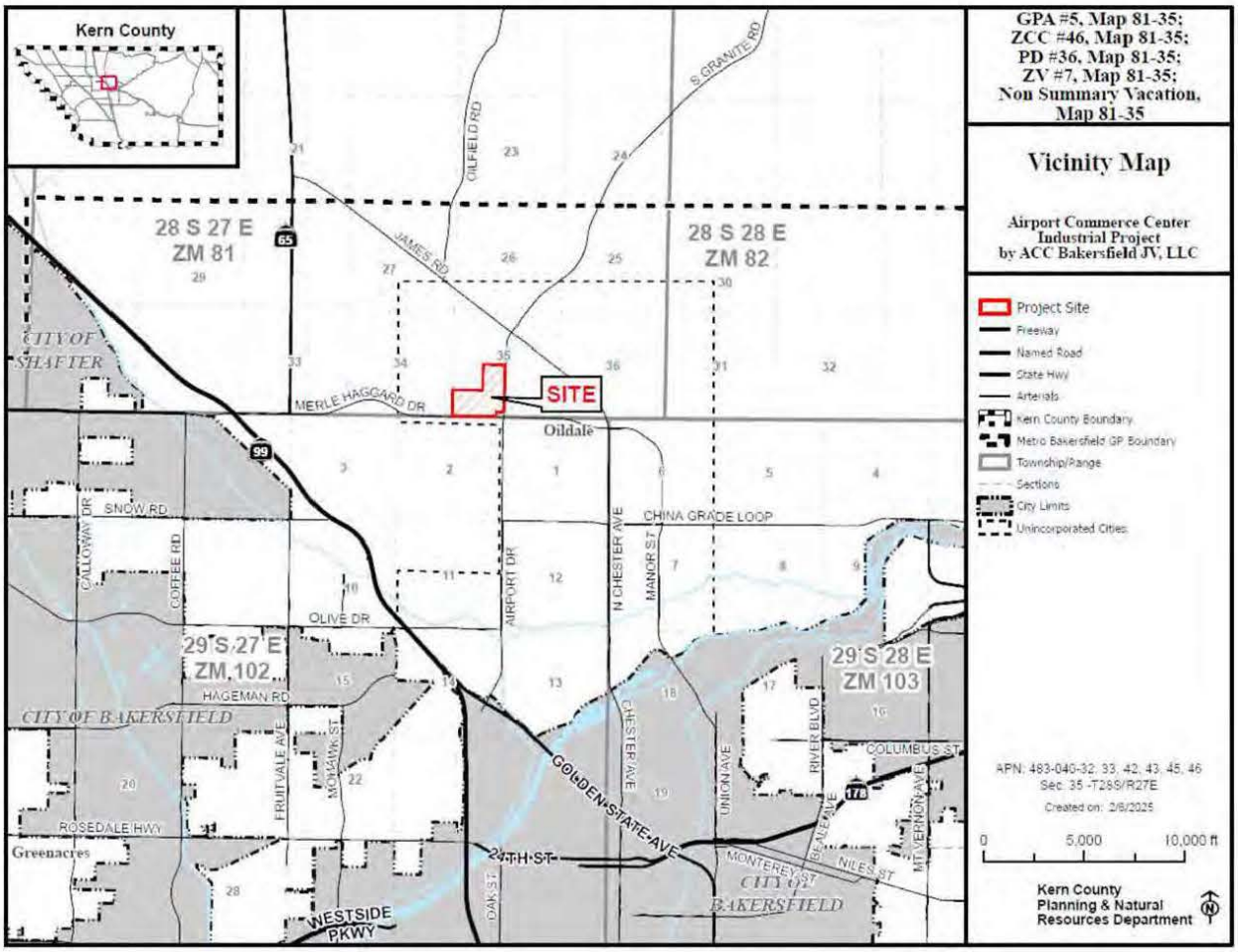


Figure 2 – Aerial Landscape

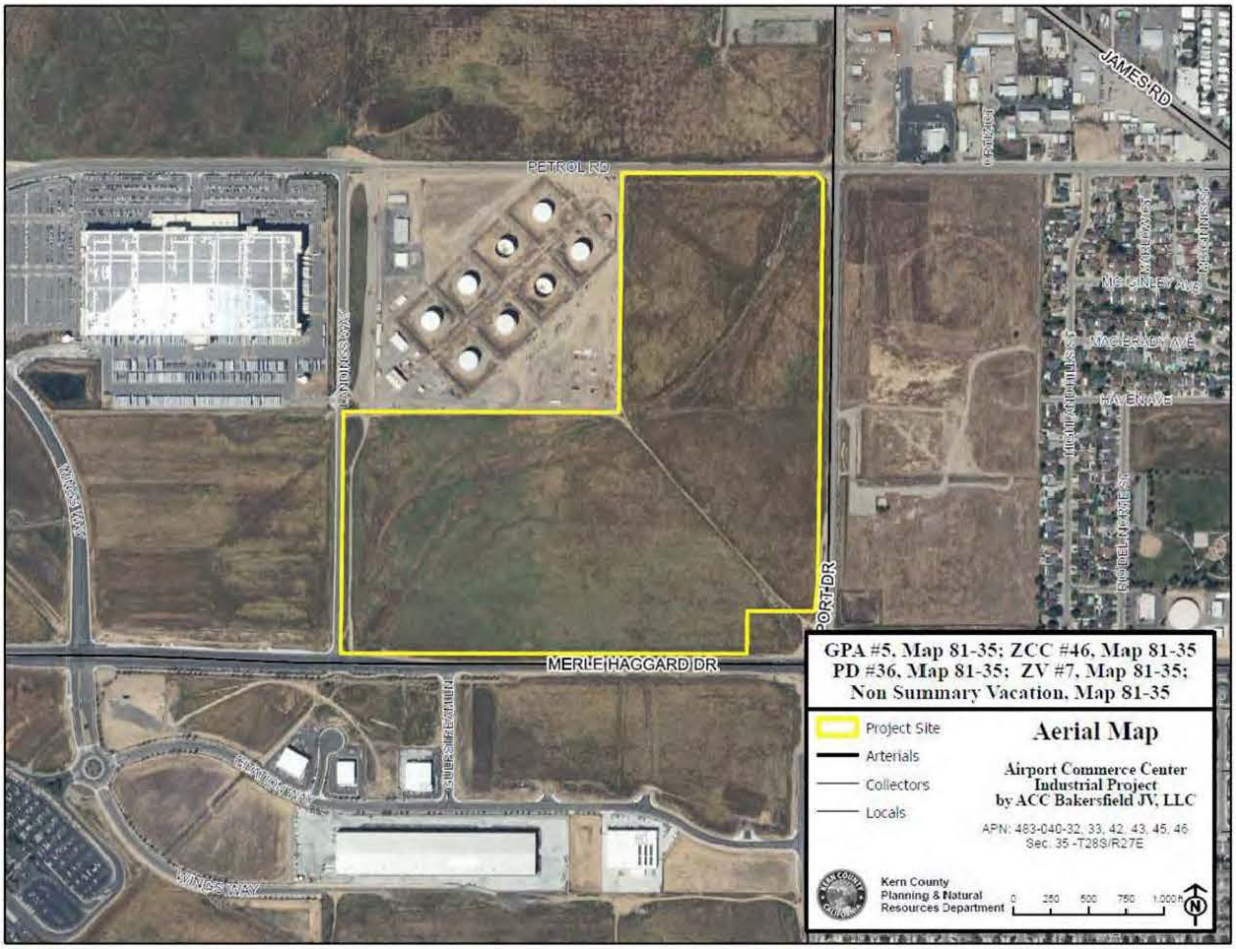


Figure 3 – Airport Land Use Compatibility Plan Map

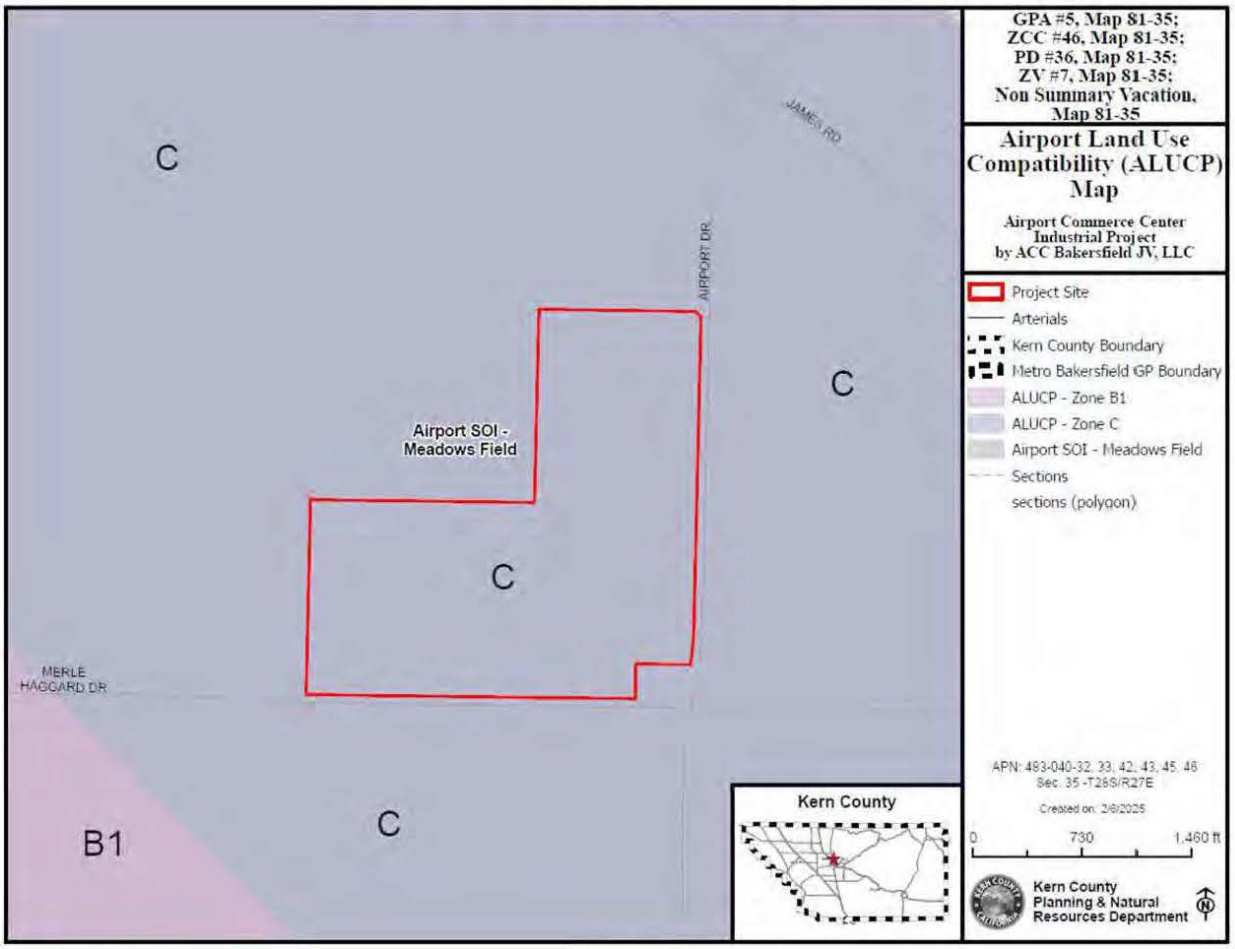


Figure 4 – Existing General Plan Map

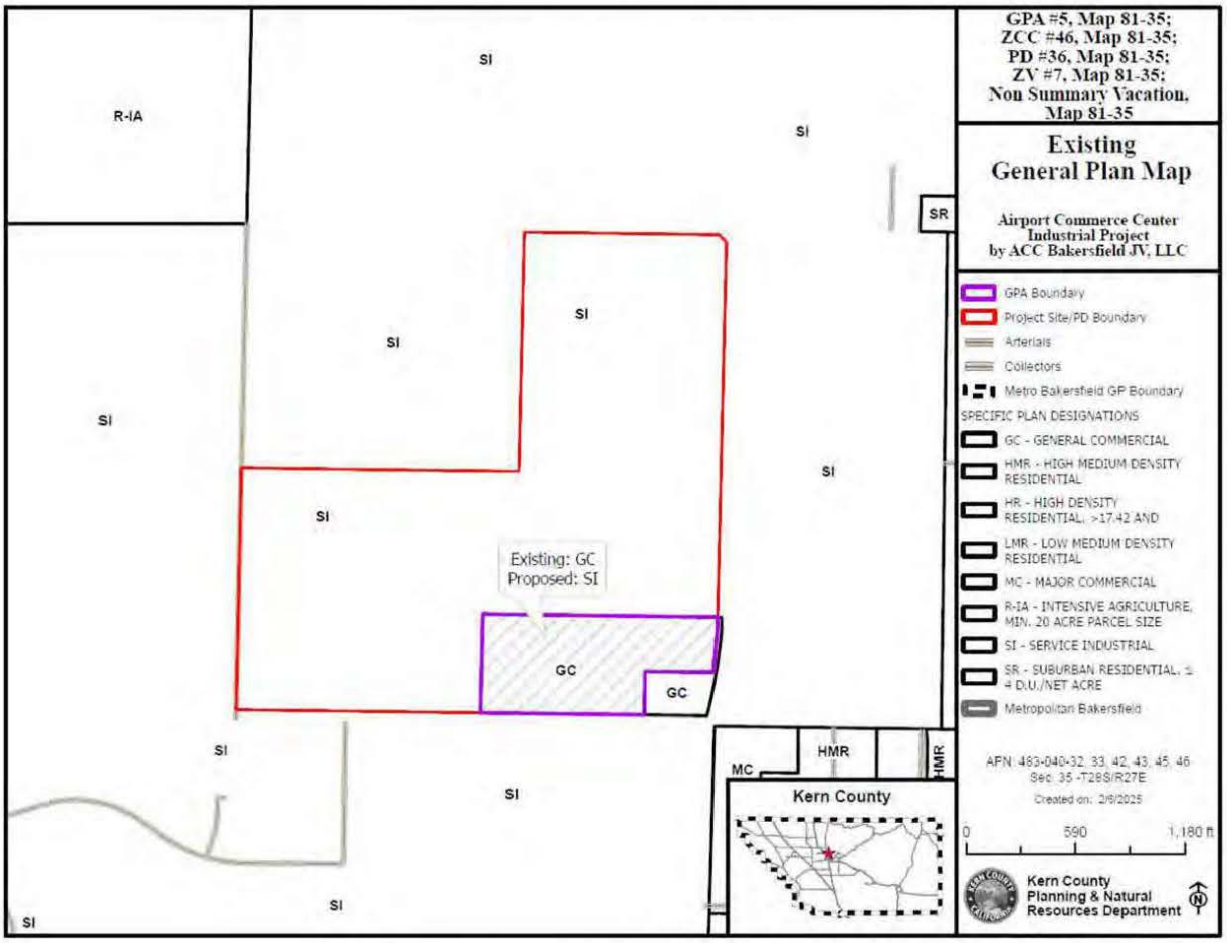


Figure 5 – Existing Zoning Classifications

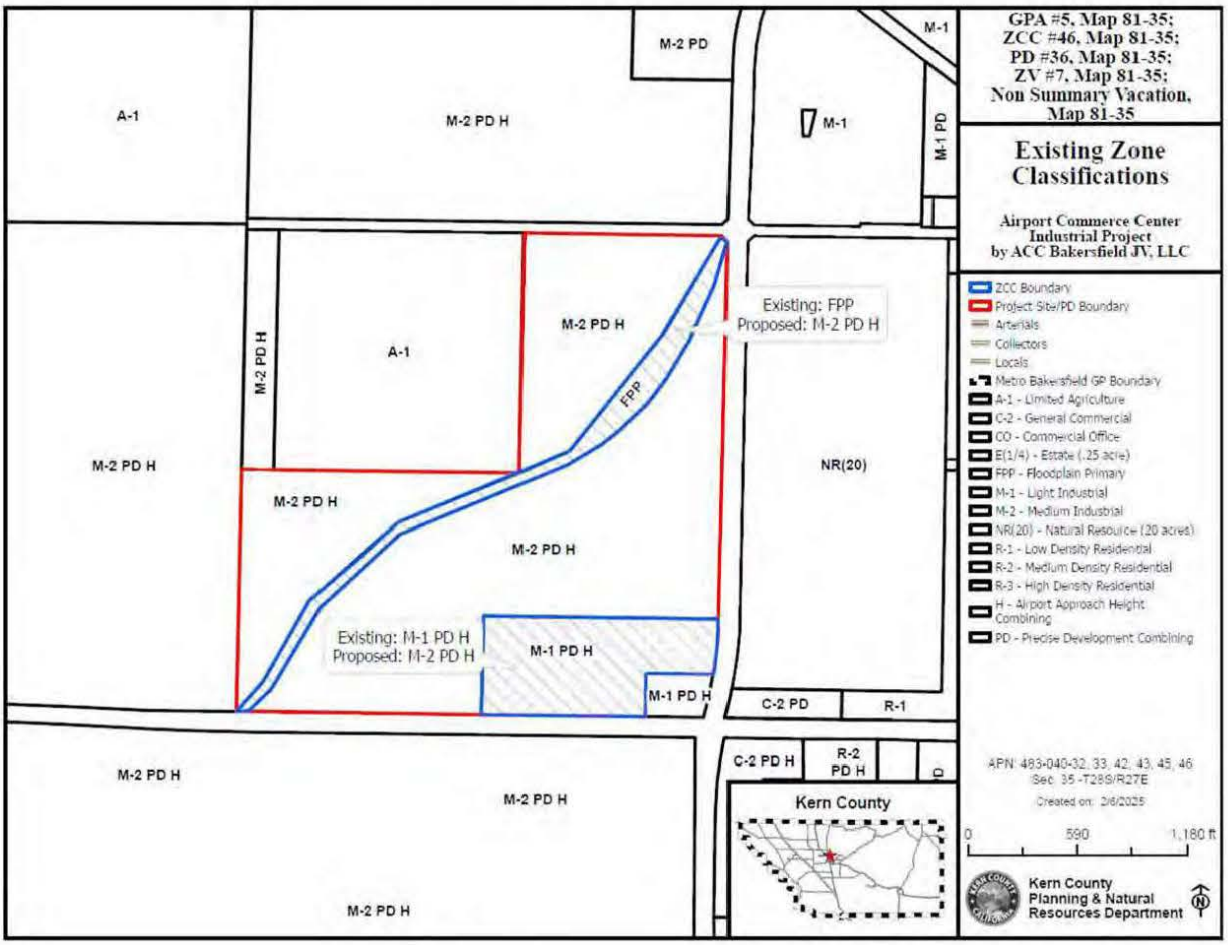


Figure 6a – Proposed Precise Development Plan – Statistical Information

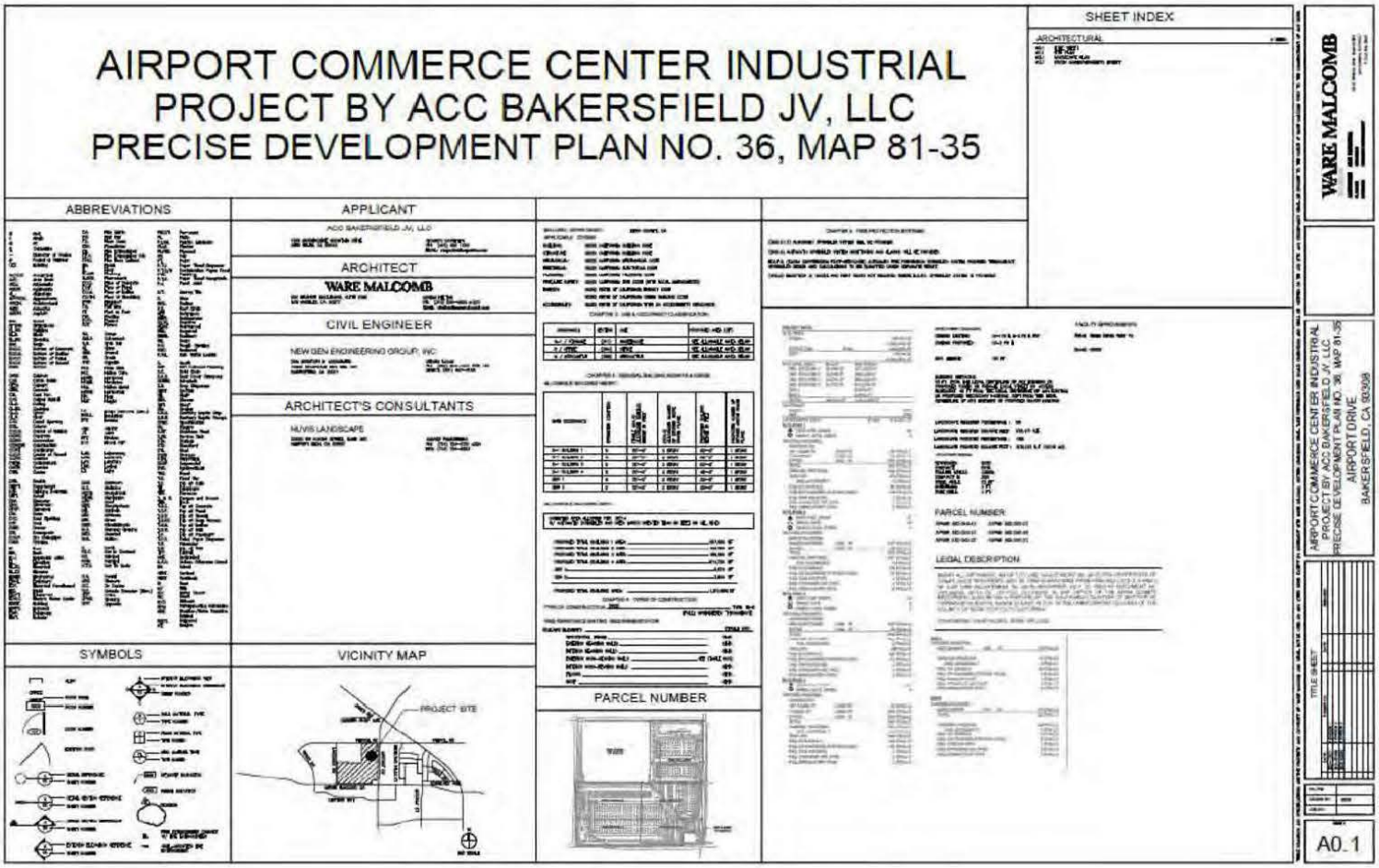


Figure 6b – Proposed Precise Development Plan - Overall Site Plan

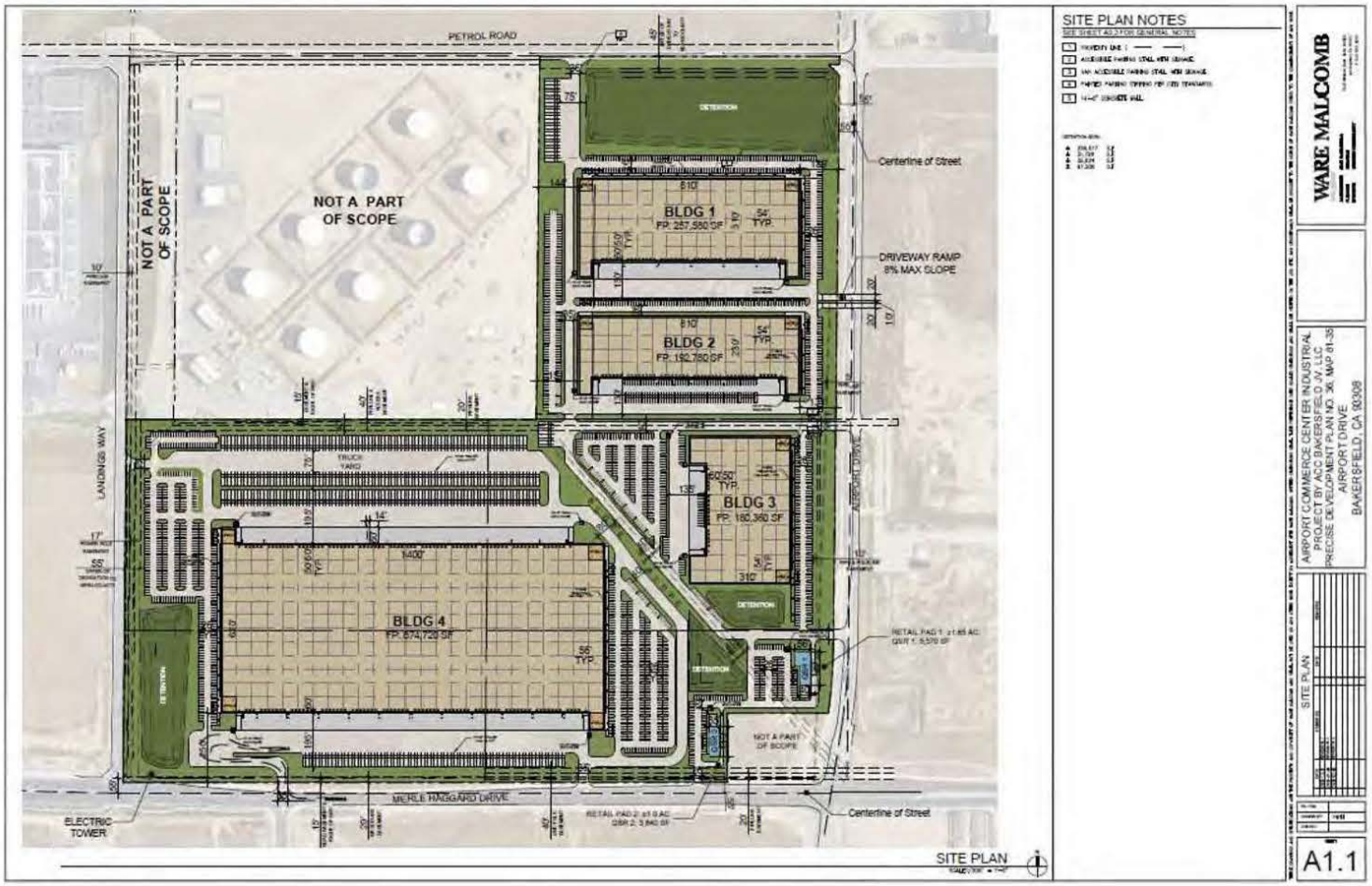
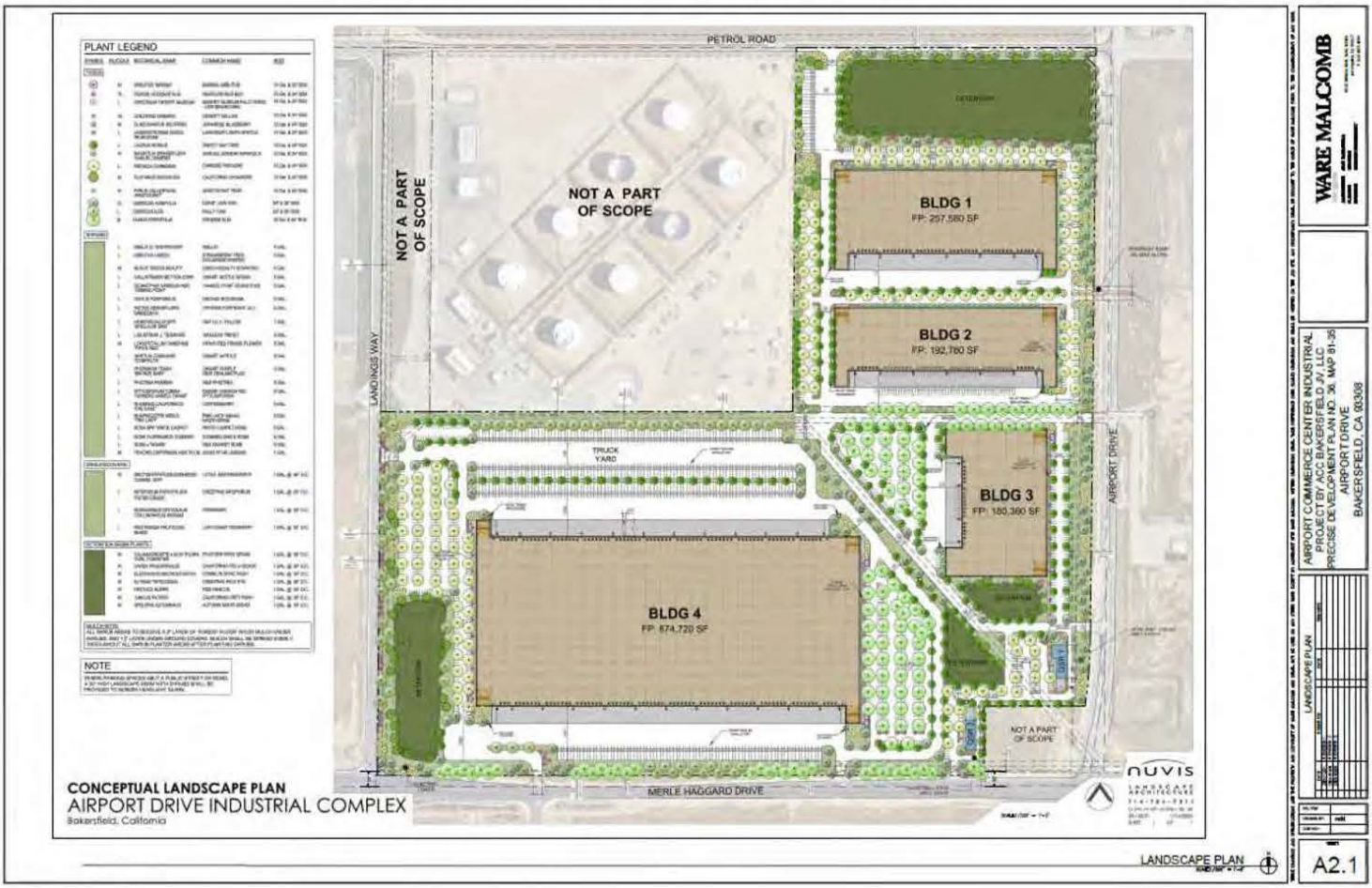


Figure 6c – Proposed Precise Development Plan – Landscaping



2. Kern County Environmental Checklist Form

2.1. Environmental Factors Potentially Affected

In accordance with CEQA Guidelines, the County intends to prepare an Environmental Impact Report (EIR) to evaluate potential environmental effects of the project and to propose mitigation measures to reduce any significant effects identified.

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "potentially significant impact" as indicated by the Kern County Environmental Checklist. As such, the analysis contained within the EIR will focus on these issue areas.

☒	Aesthetics	☐	Agricultural and Forestry Resources	☒	Air Quality
☒	Biological Resources	☒	Cultural Resources	☒	Energy
☒	Geology and Soils	☒	Greenhouse Gas Emissions	☒	Hazards and Hazardous Materials
☒	Hydrology and Water Quality	☒	Land Use and Planning	☒	Mineral Resources
☒	Noise	☒	Population and Housing	☒	Public Services
☒	Recreation	☒	Transportation and Traffic	☒	Tribal Cultural Resources
☒	Utilities/Service Systems	☐	Wildfire	☒	Mandatory Findings of Significance

Other Environmental Issues

The County conducted a preliminary review of the proposed project and has determined it is not likely to result in significant environmental effects to the following resources. Therefore, further analysis is not warranted in the EIR.

- **Agricultural and Forestry Resources**: The project proposal does not include the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use as the project is not currently zoned for agricultural use and has not been farmed within the last 10 years. The proposed project site is not under a Williamson Act Contract and is not located within an agricultural preserve area. The project site does not contain forest land and is not zoned for forestry resource use.

- **Wildfire**: The project site is located in an urbanized area and is not located in a state responsibility area or land classified as a high fire hazard.

2.2. Determination

Based on this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☒ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (a) has been adequately analyzed in an earlier

document pursuant to applicable legal standards, and (b) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENT IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature:
Nicole Menchaca

Date:
March 13, 2025

Printed Name:
Nicole Menchaca

Title:
Supervising Planner

AGENDA

KERN COUNTY PLANNING & NATURAL RESOURCES DEPARTMENT

Scoping Meeting

Kern County Public Services Building
2700 "M" Street, Conference Room 1A – Public Meeting Room
Bakersfield, California

April 2, 2025 – 1:30 p.m.

Pursuant to revised Section 21083.9 of the Public Resources Code, California Environmental Quality Act, effective January 1, 2002, this scoping meeting is being held to receive agency comments on the preparation of Environmental Impact Reports (EIR) on certain projects. The process of determining the scope, focus, and content of the EIR is known as "scoping." Scoping helps to identify the range of actions, alternatives, environmental effects, methods of assessment, and mitigation measures to be analyzed in depth, and eliminate from detailed study those issues that are not important to the decision at hand. This is not a public hearing; however, the public may be present and offer comments. If you attend as a member of the public to address an item on the agenda, please let the chairperson know when discussion begins on that item. Each project will be presented by staff followed by an opportunity for comments for the record.

A. INTRODUCTION: Staff and format of meeting

B. NEW CASES:

EIR – Notice of Preparation:
Airport Commerce Center Industrial Project by ACC Bakersfield JV, LLC (PP24405)
GPA No. 5, Map 81-35; ZCC No. 46, Map 81-35; PD Plan 36, Map 81-35; ZV 7, Map 81-35; Nonsummary Vacation, Map 81-35

C. ADJOURNMENT: Staff closing remarks

AMERICANS WITH DISABILITIES ACT
(Government Code Section 54953.2)

Disabled individuals who need special assistance to attend or participate in the scoping meeting may request assistance at the Kern County Planning Department or by calling Alyssa Torres at (661) 862-8615. Every effort will be made to reasonably accommodate individuals with disabilities by making meeting materials available in alternative formats. Requests for assistance should be made five (5) working days in advance whenever possible.

Posted: March 26, 2025 NM

SUBMIT WRITTEN COMMENTS ON THE NOP BY APRIL 11, 2025 AT 5:00 PM

Mail to:
Kern County Planning and Natural Resources Department
Attn: Nicole Menchaca
2700 'M' Street, Suite 100
Bakersfield, CA 93301
Email: huiskenn@kerncounty.com
Phone: 661-862-8738

SUMMARY OF PROCEEDINGS

KERN COUNTY AGENCY SCOPING MEETING

Kern County Planning and Natural Resources Department
2700 M Street, Suite 100
Bakersfield, California

Conference Room 1A

Date April 2, 2025

STAFF ATTENDANCE:
Nicole Menchaca, Supervising Planner
Katrina Slayton, Division Chief
Andrea Calderon, Planner II
Jack Foster, Planner II
Esther Villa, Planner I

The meeting convened at 1:30 p.m. with Staff and Matt Howell as a representative of the Airport Commerce Center Industrial Project in attendance. Items were then discussed in order as identified on the agenda.

NOTICE OF PREPARATION PROJECT:

EIR – Notice of Preparation:
Airport Commerce Center Industrial Project by ACC Bakersfield JV, LLC (PP24405)
GPA No. 5, Map 81-35; ZCC No. 46, Map 81-35; PD Plan 36, Map 81-35; ZV 7, Map 81-35; Nonsummary Vacation, Map 81-35

Two (2) Kern County Airport Staff members, Eric Grant and Michael Musca, and one (1) member of the public Jorge Torres from Western States Regional Council of Carpenters were present, none of whom provided comments.

Public testimony closed at approximately 1:37 p.m.

Notes prepared by
Nicole Menchaca, Supervising Planner

Nicole Menchaca

From: Raylene Borrego <Raylene.Borrego@sanmanuel-nsn.gov>
Sent: Thursday, April 17, 2025 4:35 PM
To: Nicole Menchaca
Subject: Response to AB52: Tehachapi Bench Vineyard Industrial Project, (PP25403), Kern County; [COU-KERN-2025-4]

CAUTION: This email originated from outside of the organization. Do not click links, open attachments, or provide information unless you recognize the sender and know the content is safe.

Hello Nicole,

Thank you for contacting the Yuhaaviatam of San Manuel Nation (formerly the San Manuel Band of Mission Indians) regarding the above-referenced project. YSMN appreciates the opportunity to review the project documentation, which was received by the Cultural Resources Management Department on April 15th, 2025. The proposed project is located outside of Serrano ancestral territory and, as such, YSMN will not be requesting to receive consulting party status with the lead agency or to participate in the scoping, development, or review of documents created pursuant to legal and regulatory mandates.

Kindly,
Raylene

Raylene Borrego
Cultural Resources Technician
Raylene.Borrego@sanmanuel-nsn.gov
O:(909) 864-8933 x 50-2035
M:(909) 737-3349
26569 Community Center Dr Highland, California 92346



Nicole Menchaca

From: Wildlife R4 CEQA Program <R4CEQA@wildlife.ca.gov>
Sent: Friday, April 11, 2025 2:51 PM
To: Nicole Menchaca
Cc: Colindres, Marile@Wildlife; state.clearinghouse@opr.ca.gov
Subject: Airport Commerce Center Industrial Project (Project) NOP SCH No. 2025030498.pdf
Attachments: Airport Commerce Center Industrial Project (Project) NOP SCH No. 2025030498.pdf

CAUTION: This email originated from outside of the organization. Do not click links, open attachments, or provide information unless you recognize the sender and know the content is safe.

Dear Nicole Menchaca,

Please see the attached letter.

If you have any questions regarding this letter or further coordination, please contact Marile Colindres, Environmental Scientist, at the address provided on this letterhead, by telephone at (559) 974-3452, or by electronic mail at marile.colindres@wildlife.ca.gov.

Thank you,

R4 CEQA Support Team.

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State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Central Region
1234 East Shaw Avenue
Fresno, California 93710
(559) 243 - 4005
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

April 11, 2025

Nicole Menchaca, Supervising Planner
Kern County Planning and Natural Resources Department
2700 "M" Street, Suite 100
Bakersfield, California 93301
(661) 862 – 8738
huiskenn@kerncounty.com

Subject: Airport Commerce Center Industrial Project (Project)
Notice of Preparation (NOP)
State Clearinghouse No.: 2025030498

Dear Nicole Menchaca:

The California Department of Fish and Wildlife (CDFW) received a NOP from Kern County, as Lead Agency, for the above-referenced Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1]

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802.). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

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agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, reasonably foreseeable future projects may be subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of reasonably foreseeable future projects may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code will be required.

CDFW Ecological Reserve: Fish and Game Code section 1583 states "Except in accordance with the regulations of the commission it is unlawful to enter upon any ecological reserves established under the provisions of the article, or to take therein any bird or the nest or eggs thereof, or any mammal, fish, mollusks, crustaceans, amphibia, reptiles or any other form of plant or animal life." In addition, California Code of Regulations, Title 14, Section 630 states "All ecological reserves are maintained for the primary purpose of developing a statewide program for protection of rare, threatened, or endangered native plants, wildlife, aquatic organisms, and specialized terrestrial or aquatic habitat types", and therefore, any other activity on these lands is restricted.

Fully Protected Species: CDFW has jurisdiction over fully protected species of birds, mammals, amphibians and reptiles, and fish, pursuant to Fish and Game Code sections 3511, 4700, 5050, and 5515. Fully protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except as follows:

- Take is for necessary scientific research,
- Efforts to recover a fully protected, endangered, or threatened species, live capture, and relocation of a bird species for the protection of livestock, or
- They are a covered species whose conservation and management is provided for in a Natural Community Conservation Plan (Fish & G. Code, §§ 3511, 4700, 5050, & 5515).

Additionally, specified types of infrastructure projects may be eligible for an Incidental Take Permit (ITP) for unavoidable impacts to fully protected species if certain conditions are met (see Fish & G. Code §2081.15). Project proponents should consult with CDFW early in the Project planning process if an ITP may be pursued for the Project.

Nesting Birds: CDFW has jurisdiction over actions with potential to result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections that protect birds, their eggs and nests include, sections 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any

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bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird).

Unlisted Species: Species of plants and animals need not be officially listed as Endangered, Rare, or Threatened on any State or federal list pursuant to CESA and/or the federal Endangered Species Act (ESA) to be considered Endangered, Rare, or Threatened under CEQA. If a species can be shown to meet the criteria specified in the CEQA Guidelines (Cal. Code Regs., tit. 14, Chapter 3, § 15380), it should be fully considered in the environmental analysis for the Project.

PROJECT DESCRIPTION SUMMARY

Proponent: ACC Bakersfield JV, LLC

Objective: The Project proposes to construct four single-story industrial warehouses totaling 1,505,440 square feet, two quick-serve restaurants, and related site improvements. Off-site improvements along Airport Drive, Merle Haggard Drive, Landings Way, and Petrol Road are also part of the Project.

Location: The Project is located on approximately 109 acres outside of the City of Bakersfield limits in the unincorporated Oildale area of Kern County. The property is surrounded by Petrol Road, Merle Haggard Drive, Landings Way, and Airport Drive. Meadows Field Airport is located approximately 0.3 miles southwest of the Project and this Project is within its Sphere of Influence. The Assessor's Parcel Numbers (APNs) associated with the Project are: 483-040-32, 483-040-33, 483-040-42, 483-040-43, 483-040-45, and 483-040-46.

Timeframe: December 2025 to May 2028.

COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments and recommendations to assist Kern County in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the Draft Environmental Impact Report prepared for this Project.

Proximity of Bakersfield Cactus Ecological Reserve

The Project site is directly adjacent to CDFW's Bakersfield Cactus Ecological Reserve (BCER). The BCER provides habitat for a number of special-status species and is known to support a robust population of the State and federally endangered and California Rare Plant Rank (CRPR) 1B.1 Bakersfield cactus (*Opuntia basilaris var. treleasei*), and supports regular documented use by the State threatened and federally endangered San Joaquin kit fox (*Vulpes macrotis mutica*). The Project's adjacency to

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the BCER increases the likelihood that special-status species, particularly San Joaquin kit fox (SJKF) are currently utilizing the habitats within the Project, and may continue to do so to some extent after Project construction.

Direct impacts to the BCER are prohibited. In addition, CDFW recommends that Project facilities be sited and designed to minimize and avoid indirect impacts to the BCER, including but not limited to impacts associated with noise, traffic, and lighting. The BCER was acquired and permanently conserved to mitigate for impacts to species such as Bakersfield cactus and SJKF, associated with residential development in and around the City of Bakersfield. Because the BCER was conserved established solely to mitigate impacts to threatened and endangered species habitat, any activities, such as implementation of the proposed Project, which could degrade the habitat quality, directly impact wildlife utilizing these areas, or limit the habitat connectivity in these areas should mitigate these impacts by protection in perpetuity of an additional appropriate amount of acreage in the Project area vicinity. CDFW strongly recommends including an appropriately sized buffer between the Project footprint and the BCER.

Additionally, CDFW recommends that a robust cumulative impacts analysis be conducted for biological resources as part of the Project and that CDFW's Regional Ecological Reserve Management Unit staff be contacted well in advance of Project initiation. These recommendations are provided in more detail in the editorial comments and/or suggestions section below.

Special-status Species

Based on aerial imagery, the Project site contains regularly disked annual grassland and ruderal habitats. The site also appears to be bisected by a stream that runs from the northeast corner of the Project site to the southwest corner. The Project site is bordered by an existing tank farm located to the northwest of the Project site; regularly disked annual grassland and ruderal vegetation to the south; an Amazon warehouse/logistics facility to the west; and regularly disked ruderal vegetation to the east.

Based on a review of the Project Description, aerial imagery, the surrounding habitat, and California Natural Diversity Database (CNDDB) records (CDFW 2025), and our own BCER survey data, the Project site is within the geographic range of several special-status animal species including the State and federally endangered and State fully-protected blunt-nosed leopard lizard (*Gambelia sila*), the State and federally endangered and CRPR 1B.1 Bakersfield cactus; the federally endangered and State threatened SJKF ; the State threatened Swainson's hawk (*Buteo swainsoni*); the State candidate western burrowing owl (*Athene cunicularia hypugaea*) and Crotch's bumble bee (*Bombus crotchii*); and the State Species of Special Concern American badger (*Taxidea taxus*), Bakersfield legless lizard (*Anniella grinnelli*), and California glossy snake (*Arizona elegans occidentalis*). These resources would need to be evaluated and

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addressed prior to any approvals that would allow ground-disturbing activities or land use changes.

To adequately assess potential Project related impacts to biological resources in the Draft Environmental Impact Report (DEIR), CDFW recommends that a qualified biologist perform relevant database reviews and other research of the Project area, then conduct focused habitat assessments and/or focused biological surveys during the appropriate survey period(s) in order to determine whether any special-status species may be present within the Project site. CDFW recommends this initial work be documented and used to inform further efforts that may be needed thereafter including the need for additional protocol surveys and/or the development of avoidance, minimization, and/or mitigation measures. This information and analysis may then be used to consider the development of modified or new project alternatives to avoid and minimize potentially significant environmental impacts on the biological environment. This information is critical to make an informed decision during the CEQA process and to ensure Project compliance with CESA, Fish and Game code, and other applicable State and federal laws and regulations.

Blunt-Nosed Leopard Lizard

The Project site is within the known geographic range of blunt-nosed leopard lizard (BNLL) and several occurrences are noted within 10 miles of the Project site (CDFW 2025). Suitable BNLL habitat includes all areas of grassland and shrub habitat that contain required habitat elements, such as small mammal burrows and open areas for basking. BNLL are also known to utilize open space patches between suitable habitat features including disturbed sites and unpaved access roadways. Based on aerial imagery and the information provided in the NOP, portions of the Project site may contain suitable habitat for BNLL.

As BNLL have the potential to occupy the Project site, CDFW recommends that a qualified biologist conduct protocol surveys in accordance with the "Approved Survey Methodology for the Blunt-nosed Leopard Lizard" (CDFW 2019) as part of the biological technical studies conducted in support of the DEIR. This survey protocol, designed to optimize BNLL detectability, reasonably assures CDFW that ground disturbance will not result in take of this fully protected species.

CDFW also recommends the DEIR include the following:

Recommended Mitigation Measure 1: BNLL Surveys

CDFW recommends that a qualified biologist conduct protocol surveys in accordance with the "Approved Survey Methodology for the Blunt-nosed Leopard Lizard" (CDFW 2019) prior to the initiation of any ground-disturbance activities that may occur as part of this Project. This survey protocol, designed to optimize

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BNLL detectability, reasonably assures CDFW that ground disturbance will not result in take of this fully protected species.

Recommended Mitigation Measure 2: BNLL Take Avoidance

CDFW also recommends that consultation with CDFW occur to discuss how to implement ground-disturbing activities and avoid take if any BNLL detection, known burrows, or egg clutch sites are detected during surveys or during construction of the Project.

Special-Status Plants, Including Bakersfield Cactus

Several species of special-status plants have the potential to occur within the Project site, including Bakersfield cactus (BC). BC is known to occur within the BCER, which is located directly adjacent to the Project site. Based on aerial imagery, the Project site consists of annual grassland habitat interspersed with small pockets of valley saltbush scrub, which may support special-status plants, including BC. Special-status plant species are threatened with habitat loss and habitat fragmentation resulting from development, vehicle and foot traffic, and introduction of non-native plant species (CNPS 2025), all of which may be unintended direct and indirect impacts of the Project. Therefore, Project activities may potentially have significant indirect, direct, and cumulative impacts to populations of the species mentioned above if present in and/or adjacent to the Project site.

CDFW recommends that the Project site be surveyed for special-status plants by a qualified botanist following the "Protocols for surveying and evaluating impacts to special-status native plant populations and sensitive natural communities" (CDFW 2018) as part of the biological technical studies conducted in support of the DEIR. This protocol, which is intended to maximize detectability, includes identification of reference populations to facilitate the likelihood of field investigations occurring during the appropriate floristic period.

CDFW also recommends the DEIR include the following:

Recommended Mitigation Measure 3: Special-status Plants Avoidance Buffer

If BC or other special-status plants are detected, CDFW recommends special-status plant species be avoided whenever possible by delineating and observing a no-disturbance buffer of at least 50 feet from the outer edge of the plant population(s) or specific habitat type(s) required by State listed and special-status plant species. If buffers cannot be maintained, consultation with CDFW is warranted to determine minimization and mitigation measures for impacts to special-status plant species.

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Recommended Mitigation Measure 4: Special-status Plants Take Authorization

If State-listed plant species, including BC, are identified during botanical surveys, consultation with CDFW is warranted to determine if the Project can avoid take. If take cannot be avoided, CDFW recommends the Project proponent pursue take authorization through the acquisition of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b) or section 1900 and California Code of Regulations, title 14, section 786.9, subdivision (b) to comply with CESA.

San Joaquin Kit Fox

Based on aerial imagery, information provided in the NOP, and CDFW's SJKF detections on the adjacent BCER, the Project site contains suitable habitat for SJKF denning and foraging. Specifically, the Project site is within the known geographic range of SJKF, the species is known to inhabit the Project site and adjacent BCER, and there are multiple nearby occurrences listed on CNDDB (CDFW 2025). The Bakersfield area is home to a significant population of SJKF and the urban population of SJKF has been recorded to utilize certain types of anthropogenically altered habitats (Cypher 2013). In addition, SJKF may be attracted to both construction materials (pipes, etc.) and construction footprints due to the type and level of activity (excavation, etc.) and the loose, friable soils that are created as a result of intensive ground disturbance. SJKF will readily use shipping containers, portable buildings, and stacks of materials (e.g., I-beams, wooden boards) with spaces within or underneath them for denning, in addition to pipes and culverts (Cypher et al. 2023). Therefore, as a minimization measure during construction, CDFW recommends thoroughly inspecting all construction materials or structures with sufficient spaces for SJKF, in addition to pipes and culvert-like structures, before these materials are used or moved in any way. Another recommended minimization measure which would help deter SJKF from creating dens under construction materials is to elevate materials one foot or more off the ground using k-rails or similar structures.

As SJKF have a high potential to den and/or forage within the Project site and have been documented within the Project footprint, CDFW recommends that the Project proponent pursue SJKF take authorization through the acquisition of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b) to comply with CESA.

In addition, to assess and minimize potential Project related impacts to SJKF dens, CDFW recommends that a qualified biologist assess the presence/absence of SJKF by conducting focused surveys following the U.S. Fish and Wildlife Service (USFWS) "Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance" (USFWS 2011) to detect SJKF and their sign in all Project areas and a 500-foot buffer of Project areas as part of the biological studies conducted in support of the DEIR.

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CDFW also recommends the DEIR include the following:

Recommended Mitigation Measure 5: SJKF Preconstruction Surveys

CDFW recommends assessing presence/absence of SJKF by conducting surveys following the USFWS' "Standardized recommendations for protection of the San Joaquin kit fox prior to or during ground disturbance", prior to the initiation of Project ground disturbance activities. Specifically, CDFW recommends conducting these surveys over the entirety of the Project site no less than 14-days and no more than 30-days prior to beginning of ground and/or vegetation disturbing activities.

Recommended Mitigation Measure 6: SJKF Avoidance Buffer

CDFW recommends implementing no-disturbance buffers, as described in the USFWS' "Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance" (2011) (USFWS Protocol) around potentially suitable or known SJKF den sites.

Recommended Mitigation Measure 7: SJKF Take Authorization

If the no-disturbance buffers outlined in the USFWS Protocol for SJKF is not feasible, CDFW recommends that consultation with CDFW occur to discuss how to implement the Project and avoid take. If take cannot be avoided, acquisition of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b) is required to comply with CESA.

Swainson's Hawk

Swainson's hawks (SWHA) are known to breed within the Central Valley of California and prefer to nest and forage in alfalfa, fallow fields, field crops, and grassland habitats with a sufficient source of small mammals (CDFG 1994). Based on aerial imagery, the Project site contains suitable habitat for SWHA foraging, increasing the likelihood of SWHA occurrence within the vicinity. In addition, any power poles or trees in the Project vicinity may be utilized for perching and/or nesting. SWHA are known to travel up to 18 miles to forage and are also attracted to ground disturbing activities such as disking because these activities make prey vulnerable by reducing cover (Estep 1989). Several CNDDB occurrences are noted within this 18-mile distance of the Project site. SWHA exhibit high nest-site fidelity year after year and lack of suitable habitat limits their local distribution and abundance (CDFW 2016).

Therefore, CDFW recommends surveys for SWHA be conducted as part of the biological technical studies conducted in support of the DEIR by a qualified biologist following the survey methods developed by the Swainson's Hawk Technical Advisory Committee (SWHA TAC 2000).

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CDFW also recommends the DEIR include the following:

Recommended Mitigation Measure 8: SWHA Surveys Prior to Construction

Depending on the time between the initial survey efforts conducted in support of the DEIR and Project construction, CDFW recommends that additional surveys, following the survey methodology developed by the SWHA Technical Advisory Committee, be repeated the survey season immediately prior to any ground disturbing activities that occur as part of this Project.

Recommended Mitigation Measure 9: SWHA Avoidance Buffer

If Project-specific activities will take place during the SWHA nesting season (i.e., March 1 through September 15), and active SWHA nests are present, CDFW recommends a minimum ½-mile no-disturbance buffer be delineated and maintained around each nest, regardless of whether it was detected by surveys or observed incidentally. These buffers would remain in place until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival, to prevent nest abandonment and other take of SWHA as a result of Project activities.

Recommended Mitigation Measure 10: SWHA Take Authorization

CDFW also recommends that in the event an active SWHA nest is detected, and a ½-mile no-disturbance buffer is not feasible, consultation with CDFW is warranted to discuss how to implement the Project and avoid take. If take cannot be avoided, take authorization through the acquisition of an ITP pursuant to Fish and Game Code section 2081 subdivision (b) is necessary to comply with CESA.

Recommended Mitigation Measure 11: SWHA Foraging Habitat Mitigation

Finally, CDFW recommends compensation for the loss of SWHA foraging habitat as described in CDFW's "Staff Report Regarding Mitigation for Impacts to Swainson's Hawks" (CDFG 1994) to reduce impacts to foraging habitat to less than significant. The Staff Report recommends that mitigation for habitat loss occur within a minimum distance of 10 miles from known nest sites. CDFW has the following recommendations based on the Staff Report:

- For projects within 1 mile of an active nest tree, a minimum of 1 acre of habitat management (HM) land for each acre of development is advised.
- For projects within 5 miles of an active nest but greater than 1 mile, a minimum of ¾ acre of HM land for each acre of development is advised.

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- For projects within 10 miles of an active nest tree but greater than 5 miles from an active nest tree, a minimum of ½ acre of HM land for each acre of development is advised.

Western Burrowing Owl

The California Fish and Game Commission named western burrowing owl (BUOW) as a candidate for listing as a protected species under CESA on October 10, 2024. This action advanced the species to candidacy under CESA and as such BUOW now receives the same legal protection afforded to an endangered or threatened species (Fish & G. Code, §§ 2074.2 & 2085). It is illegal to import, export, take (hunt, pursue, catch, capture, or kill, or attempt engage in any of these activities), possess, purchase, or sell BUOW or any part or product thereof (Fish & G. Code, §§§ 86, 2080, 2085).

The Project site is within the known geographic range of BUOW and there are multiple historic and recent occurrences located within five miles of the Project site (CDFW 2025). BUOW inhabit open grasslands and desert scrublands containing small mammal burrows, a requisite habitat feature used by BUOW for nesting and cover. Based on aerial imagery and the information provided in the DEIR, the Project site and adjacent lands contain suitable habitat for BUOW nesting and foraging.

As BUOW are known to occur within the Project vicinity and suitable nesting and foraging habitat is present within the Project site, CDFW recommends assessing presence/absence of BUOW by having a qualified biologist conduct surveys following CDFW's "Staff Report on Burrowing Owl Mitigation" (CDFG 2012) as part of the biological studies conducted in support of the DEIR.

CDFW also recommends the DEIR include the following:

Recommended Mitigation Measure 12: BUOW Pre-construction Surveys

Depending on the time between the initial survey efforts conducted in support of the DEIR and Project construction, CDFW recommends that a qualified biologist conduct surveys for BUOW following the 2012 Staff Report on Burrowing Owl Mitigation (CDFG 2012) be conducted the survey season immediately prior to initiation of ground-disturbance activities.

Recommended Mitigation Measure 13: BUOW Avoidance Buffer

Should a BUOW or known BUOW den (active or inactive) be detected, either during pre-construction surveys or construction activities, CDFW recommends that no-disturbance buffers, as outlined in the 2012 Staff Report on Burrowing Owl Mitigation (CDFG 2012), be implemented prior to and during any ground-disturbing activities. CDFW also recommends that these buffers be implemented for both wintering and breeding BUOW.

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Recommended Mitigation Measure 14: BUOW Take Authorization

If a BUOW or known BUOW den (active or inactive) is detected, and the no-disturbance buffers outlined in the 2012 Staff Report on Burrowing Mitigation are not feasible, consultation with CDFW is warranted to discuss how to implement the Project and avoid take. If take cannot be avoided, take authorization through the acquisition of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b) is necessary to comply with CESA.

Crotch's Bumble Bee

The Project site is within the known geographical range of Crotch's bumble bee (CBB) and a historical occurrence has been documented within two miles of the Project site (CDFW 2025). CBB are known to inhabit areas of grasslands and scrub that contain requisite habitat elements for nesting, such as small mammal burrows and bunch/thatched grasses, and these habitat elements may be present within the Project site and Project vicinity.

As the Project site is within the known range for CBB and suitable nesting and foraging habitat is present within the Project site and vicinity, CDFW recommends a qualified biologist conduct a habitat assessment as part of the biological technical studies conducted in support of the DEIR to determine if the Project site or its immediate vicinity contain habitat suitable to support CBB. Potential nesting sites, which include all small mammal burrows, perennial bunch grasses, thatched annual grasses, brush piles, old bird nests, dead trees, and hollow logs would need to be documented as part of the assessment. If potentially suitable habitat is identified, CDFW recommends that a qualified biologist conduct focused surveys for CBB, and their requisite habitat features following the methodology outlined in the Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species (CDFW 2023), as part of the biological technical studies conducted in support of the DEIR.

CDFW also recommends the DEIR include the following:

Recommended Mitigation Measure 15: CBB Surveys

If potentially suitable habitat is identified as part of the biological technical studies conducted in support of the DEIR, CDFW recommends that a qualified biologist conduct focused surveys for CBB the survey season immediately prior to construction, following the methodology outlined in the Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species (CDFW 2023).

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Recommended Mitigation Measure 16: CBB Avoidance

If CBB is detected, then CDFW recommends that all small mammal burrows and thatched/bunch grasses be avoided by a minimum of 50 feet to avoid take and potentially significant impacts. If ground-disturbing activities will occur during the overwintering period (October through February), consultation with CDFW is warranted to discuss how to implement Project activities and avoid take. Any detection of CBB prior to or during Project implementation warrants consultation with CDFW to discuss how to avoid take.

Recommended Mitigation Measure 17: CBB Take Authorization
If CBB is detected, either during surveys or Project construction, and take cannot be avoided, take authorization through the acquisition of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b) is necessary to comply with CESA.

State Species of Special Concern

The Project is within the geographic range of species of special concern such as American badger, Bakersfield legless lizard, and California glossy snake and suitable habitat may be present within the Project site. As such, CDFW recommends a qualified biologist conduct a habitat assessment and focused surveys for these species as part of the biological technical studies conducted in support of the DEIR.

CDFW also recommends the DEIR include the following:

Recommended Mitigation Measure 18: Surveys

CDFW recommends that a qualified biologist conduct focused surveys for American badger, Bakersfield legless lizard, and California glossy snake, using appropriate survey methodologies, immediately prior to any ground disturbing activities that may occur as part of the Project.

Recommended Mitigation Measure 19: Avoidance

Avoidance whenever possible is encouraged via delineation and observance of a 50-foot no-disturbance buffer around dens or burrows/refugia of these species. If these species are observed on the Project site, CDFW recommends that Project construction activities in their immediate vicinity cease, allowing individuals to leave the Project site on their own accord.

Editorial Comments and/or Suggestions

Nesting birds: CDFW encourages that Project ground-disturbing activities occur during the bird non-nesting season; however, if ground-disturbing or vegetation-disturbing activities must occur during the nesting season (February 1st through September 15th),

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the Project applicant is responsible for ensuring that implementation of the Project does not result in violation of the Migratory Bird Treaty Act or relevant Fish and Game Code sections as referenced above.

CDFW further recommends that a qualified biologist conduct a pre-construction survey for active nests no more than 10 days prior to the start of ground or vegetation disturbance to maximize the probability that nests that could potentially be impacted are detected. CDFW also recommends that surveys cover a sufficient area around the Project site to identify nests and determine their status. A sufficient area means any area potentially affected, either directly or indirectly, by the Project. In addition to direct impacts (i.e., nest destruction), noise, vibration, and movement of workers or equipment could also affect nests. CDFW recommends that a qualified biologist establish a behavioral baseline of all identified nests. Once Project activities begin, CDFW recommends having a qualified biologist continuously monitor nests to detect behavioral changes resulting from the Project. If behavioral changes occur, CDFW recommends halting the work causing that change and consulting with CDFW for additional avoidance and minimization measures.

If continuous monitoring of identified nests by a qualified biologist is not feasible, CDFW recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors. These buffers are advised to remain in place until the breeding season has ended or until a qualified biologist has determined the birds have fledged and are no longer reliant upon the nest or on-site parental care for survival. Variance from these no-disturbance buffers is possible when there is a compelling biological or ecological reason to do so, such as when the Project site would be concealed from a nest site by topography. CDFW recommends that a qualified biologist advise and support any variance from these buffers and notify CDFW in advance of implementing a variance.

Federally Listed Species: CDFW recommends consulting with USFWS regarding potential impacts to federally listed species including, but not limited to, BNLL, BC, and SJKF. Take under the Federal Endangered Species Act (FESA) is more broadly defined than CESA; take under FESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with essential behavioral patterns such as breeding, foraging, or nesting. Consultation with the USFWS in order to comply with FESA is advised well in advance of any Project activities.

Lake and Streambed Alteration: According to the NOP, a stream bisects through the Project site, and this stream is likely subject to CDFW's regulatory authority pursuant Fish and Game Code section 1600 et seq. Project activities that substantially change the bed, bank, and channel of any river, stream, or lake are subject to CDFW's regulatory authority pursuant Fish and Game Code section 1600 et seq. Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may (a) substantially divert or obstruct the natural flow of any river, stream, or lake;

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(b) substantially change or use any material from the bed, bank, or channel of any river, stream, or lake (including the removal of riparian vegetation): (c) deposit debris, waste or other materials that could pass into any river, stream, or lake. "Any river, stream, or lake" includes those that are ephemeral or intermittent as well as those that are perennial and may include those that are highly modified such as canals and retention basins.

CDFW is required to comply with CEQA in the issuance of a Lake or Streambed Alteration Agreement (LSAA); therefore, if the DEIR approved for the Project does not adequately describe the Project and its impacts to lakes or streams, a subsequent CEQA analysis may be necessary for LSAA issuance. For information on notification requirements, please refer to CDFW's website (https://wildlife.ca.gov/Conservation/LSA) or contact CDFW staff in the Central Region Lake and Streambed Alteration Program at (559) 243-4593.

CDFW Ecological Reserve: The Project site is within close proximity to the BCER, which provides habitat for federal, and State listed species as well as many special-status species.

In addition to the recommendations made above, CDFW recommends consultation with CDFW's Regional Ecological Reserve Management Unit staff well in advance of Project initiation to demonstrate accurate delineation of property boundaries to prevent inadvertent encroachment on CDFW-owned lands. Consultation is also recommended to discuss planned egress and egress to the Project site for the purposes of avoiding impacts on CDFW-owned lands, which is prohibited by Title 14 California Code of Regulations § 630. Please contact John Battistoni, Regional Ecological Reserve Management Unit Supervisor, at the address on the letterhead above or via email at John.Battistoni@wildlife.ca.gov.

Project Alternative Analysis: CDFW recommends that the information and results obtained from the biological technical surveys, studies, and analysis conducted in support of the Project's DEIR be used to develop and modify the Project's alternatives to avoid and minimize impacts to biological resources to the maximum extent possible. When efforts to avoid and minimize have been exhausted, remaining impacts to sensitive biological resources should be mitigated to reduce impacts to a less than significant level, if feasible.

Cumulative Impacts: CDFW recommends that a cumulative impact analysis be conducted for all biological resources that will either be significantly or potentially significantly impacted by implementation of the Project, including those whose impacts are determined to be less than significant with mitigation incorporated or for those resources that are rare or in poor or declining health and will be impacted by the Project, even if those impacts are relatively small (i.e., less than significant). Cumulative impacts are recommended to be analyzed using an acceptable methodology to evaluate the impacts of past, present, and reasonably foreseeable future projects on resources

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and be focused specifically on the resource, not the Project. An appropriate resource study area should also be identified and mapped for each resource being analyzed and utilized for this analysis. CDFW recommends closely evaluating the need for a cumulative impacts analysis for the following species as part of the DEIR due to these species being in poor or declining health or at risk: BNLL, BC, SJKF, SWHA, BUOW, CBB, American badger, Bakersfield legless lizard, and California glossy snake. CDFW staff is available for consultation in support of cumulative impacts analyses as a trustee and responsible agency under CEQA.

CNDDB: Please note that the CNDDB is populated by records through voluntary submissions of species detections. As a result, species may be present in locations not depicted in the CNDDB but where there is suitable habitat and features capable of supporting species. A lack of an occurrence record in the CNDDB does not mean a species is not present. In order to adequately assess any potential Project related impacts to biological resources, surveys conducted by a qualified biologist during the appropriate survey period(s) and using the appropriate protocol survey methodology are warranted in order to determine whether or not any special-status species are present at or near the Project site.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database, which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to the CNDDB. The CNDDB field survey form can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data. The completed form can be mailed electronically to the CNDDB at the following email address: CNDDB@wildlife.ca.gov. The types of information reported to the CNDDB can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

FILING FEES

The Project, as proposed, could have an impact on biological resources, and an assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

CONCLUSION

CDFW appreciates the opportunity to comment on the NOP to assist the Kern County in identifying and mitigating Project impacts on biological resources. A Mitigation

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Monitoring and Reporting Program (Attachment 1) is included below to assist Kern County with incorporating the recommended mitigation measures provided above.

More information on survey and monitoring protocols for sensitive species can be found at CDFW's website (https://www.wildlife.ca.gov/Conservation/Survey-Protocols). If you have any questions regarding this letter or further coordination, please contact Marile Colindres, Environmental Scientist, at the address provided on this letterhead, by telephone at (559) 974-3452, or by electronic mail at marile.colindres@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Sarah Paulson
E9964E60293D40A...

For Julie A. Vance
Regional Manager

ATTACHMENT

ec: State Clearinghouse
Governor's Office of Planning and Research
State.Clearinghouse@opr.ca.gov

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Attachment 1

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
RECOMMENDED MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

PROJECT: Airport Commerce Center Industrial Project (Project)
Notice of Preparation (NOP)

SCH No.: 2025030498

RECOMMENDED MITIGATION MEASURE	STATUS/DATE/INITIALS
Before Disturbing Soil or Vegetation	
Blunt-nosed leopard lizard (BNLL)	
Recommended Mitigation Measure 1: BNLL Surveys	
Recommended Mitigation Measure 2: BNLL Take Avoidance	
Special-status Plants	
Recommended Mitigation Measure 4: Special-status Plants Take Authorization	
San Joaquin Kit Fox (SJKF)	
Recommended Mitigation Measure 5: SJKF Preconstruction Surveys	
Recommended Mitigation Measure 7: SJKF Take Authorization	
Swainson's Hawk (SWHA)	
Recommended Mitigation Measure 8: SWHA Surveys Prior to Construction	
Recommended Mitigation Measure 10: SWHA Take Authorization	
Recommended Mitigation Measure 11: SWHA Foraging Habitat Mitigation	
Western Burrowing Owl (BUOW)	

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Recommended Mitigation Measure 12: BUOW Preconstruction Surveys	
Recommended Mitigation Measure 14: BUOW Take Authorization	
Crotch's Bumble Bee (CBB)	
Recommended Mitigation Measure 15: CBB Surveys	
Recommended Mitigation Measure 17: CBB Take Authorization	
State Species of Special Concern	
Recommended Mitigation Measure 18: Surveys	
During Construction	
Special-status Plants	
Recommended Mitigation Measure 3: Special-status Plants Avoidance Buffer	
San Joaquin Kit Fox (SJKF)	
Recommended Mitigation Measure 6: SJKF Avoidance Buffer	
Swainson's Hawk (SWHA)	
Recommended Mitigation Measure 9: SWHA Avoidance Buffer	
Western Burrowing Owl (BUOW)	
Recommended Mitigation Measure 13: BUOW Avoidance Buffer	
Crotch's Bumble Bee (CBB)	
Recommended Mitigation Measure 16: CBB Avoidance	
State Species of Special Concern	

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Recommended Mitigation Measure 19: Avoidance	

Nicole Menchaca

From: Godfrey Wachira <godfrey@careca.org>
Sent: Friday, April 11, 2025 12:55 PM
To: Nicole Menchaca
Subject: NOP Comments- Airport Commerce Center Industrial Project by ACC Bakersfield JV, LLC
Attachments: NOP COMMENTS- Airport Commerce Center.pdf

CAUTION: This email originated from outside of the organization. Do not click links, open attachments, or provide information unless you recognize the sender and know the content is safe.

Ms. Menchaca,

On behalf of CARE CA, attached please find our NOP comments on the proposed Airport Commerce Center Industrial Project by ACC Bakersfield JV, LLC.

Thank you.

Godfrey
CARE CA

CARECA

04/11/2025

VIA EMAIL ONLY

Nicole Menchaca
Planning and Natural Resources Department
Kern County
2700 "M" Street, Suite 100
Bakersfield, CA 93301
Email: huiskenn@kerncounty.com

RE: NOP Comments for Airport Commerce Center Industrial Project by ACC Bakersfield JV, LLC

Dear Ms. Menchaca,

On behalf of Californians Allied for a Responsible Economy ("CARE CA") thank you for the opportunity to provide comments on the Notice of Preparation ("NOP") for environmental review of the Airport Commerce Center Industrial Project ("Project"). The proposed project includes the construction and operation of four single-story warehouses totaling approximately 1,505,440 square feet (including 150,544 square feet for dedicated office space), two single-story quick-serve restaurants totaling 9,410 square-feet, and related site improvements.

The goal of an EIR is to provide decisionmakers and the public with detailed information about the effects of a proposed project on the environment, how significant impacts will be minimized and alternatives to the project (Pub. Res. Code § 21002.2). Ideally, the discussion should include sufficient detail to allow those who do not participate in the DEIR's preparation to understand and meaningfully deliberate the issues raised by the Project. We, therefore, respectfully request a complete analysis of all identified impacts, imposition of all feasible mitigation and study of a reasonable range of alternatives.

Since the informational sufficiency of an EIR should be at the heart of its preparation, we ask the County to consider the following requests:

Industrial Uses: The County, as lead agency, must make certain assumptions regarding the type and mix of light industrial uses that would likely occupy the proposed buildings. The DEIR should reflect a good faith effort at full disclosure by including as much information

on the nature of operations as can be reasonably obtained. If such information is unavailable, the County should study a reasonable worst-case scenario (i.e., most impactful) so that a broad and diverse range of environmental impacts are included in the analysis.

Public Health: The DEIR should also make all efforts to minimize air quality effects and likely health consequences to the greatest extent possible. In addition, we urge the County to adopt quantitative thresholds that embody climate change's existential threat to humankind to determine the significance of the Project's GHG emissions.

Mitigation Measures: Finally, we encourage the County to incorporate modern technology in the mitigation measures and ensure that the measures are effective and enforceable. A Statement of Overriding Considerations should be considered only after ALL feasible mitigation measures are included in the MMRP.

Thank you for the opportunity to submit NOP comments. Again, CARE CA respectfully requests full analysis of the environmental impacts, feasible mitigation, and reasonable alternatives to the Project.

Sincerely,



Jeff Modrzejewski
Executive Director

Nicole Menchaca

From: Matt Crow <Matt.Crow@valleyair.org>
Sent: Thursday, April 10, 2025 1:36 PM
To: Nicole Menchaca
Subject: SJVAPCD CEQA Comments: Notice of Preparation - Airport Commerce Center Industrial Project, 20250323
Attachments: SJVAPCD comment letter NOP Airport Commerce Center Industrial Project, 20250323.pdf

CAUTION: This email originated from outside of the organization. Do not click links, open attachments, or provide information unless you recognize the sender and know the content is safe.

Good Afternoon,

Please see the attached comment letter for this project.

Thank you,

Matt Crow
Air Quality Specialist II
San Joaquin Valley Air Pollution Control District
1990 E. Gettysburg Avenue Fresno, CA 93726
Phone: (559) 230.5931
Matt.Crow@valleyair.org

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING

April 10, 2025

Nicole Menchaca
County of Kern
Planning and Natural Resources Department
2700 "M" Street, Suite 100
Bakersfield, CA 93301

Project: Notice of Preparation for the Airport Commerce Center Industrial Project

District CEQA Reference No: 20250323

Dear Ms. Menchaca:

The San Joaquin Valley Air Pollution Control District (District) has reviewed the Notice of Preparation (NOP) from the County of Kern (County) for the Airport Commerce Center Industrial project. Per the NOP, the project consists of the construction of four single story warehouses totaling approximately 1,505,440 square feet, two quick-serve restaurants totaling approximately 9,410 square feet and related site improvements (Project). The Project is located on the north side of Merle Haggard Drive between Airport Drive and Landings Way in the Oildale Area of Kern County, CA.

The District offers the following comments at this time regarding the Project:

1) Project Related Emissions

At the federal level under the National Ambient Air Quality Standards (NAAQS), the District is designated as extreme nonattainment for the 8-hour ozone standards and serious nonattainment for the particulate matter less than 2.5 microns in size (PM2.5) standards. At the state level under California Ambient Air Quality Standards (CAAQS), the District is designated as nonattainment for the 8-hour ozone, PM10, and PM2.5 standards.

The District's initial review of the Project concludes that emissions resulting from construction and/or operation of the Project is expected to exceed any of the following significance thresholds as identified in the District's Guidance for Assessing and Mitigating Air Quality Impacts: https://ww2.valleyair.org/media/g4nl3p0g/gamaqi.pdf. The District recommends that

Samir Sheikh
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: (661) 392-5500 FAX: (661) 392-5585

a more detailed preliminary review of the Project be conducted for the Project's construction and operational emissions.

1a) Construction Emissions

The District recommends, to reduce impacts from construction-related diesel exhaust emissions, the Project should utilize the cleanest available off-road construction equipment.

1b) Operational Emissions

Operational (ongoing) air emissions from mobile sources and stationary sources should be analyzed separately. For reference, the District's significance thresholds are identified in the District's Guidance for Assessing and Mitigating Air Quality Impacts: https://ww2.valleyair.org/media/q4nl3p0q/gamaqi.pdf.

Recommended Mitigation Measure: At a minimum, project related impacts on air quality should be reduced to levels below the District's significance thresholds through incorporation of design elements such as the use of cleaner Heavy Heavy-Duty (HHD) trucks and vehicles, measures that reduce Vehicle Miles Traveled (VMTs), and measures that increase energy efficiency. More information on transportation mitigation measures can be found at: https://ww2.valleyair.org/media/ob0pweru/clean-air-measures.pdf

1c) Project Trip Length for HHD Truck Travel

The County's environmental review should adequately characterize and justify an appropriate trip length distance for off-site HHD truck travel to and from the Project site. Based on the following factors: 1) the Project consists of a warehouse/distribution center that is expected to generate a high volume of HHD truck trips, and 2) HHD trucks generally travel further distances for distribution. The District recommends the environmental review include a discussion characterizing an appropriate trip length distance for HHD truck travel, and reflect such appropriate distance supported by project-specific factors.

1d) Recommended Model for Quantifying Air Emissions

Project-related criteria pollutant emissions from construction and operational sources should be identified and quantified. Emissions analysis should be performed using the California Emission Estimator Model (CalEEMod), which uses the most recent CARB-approved version of relevant emissions models and emission factors. CalEEMod is available to the public and can be downloaded from the CalEEMod website at: www.caleemod.com.

2) Health Risk Screening/Assessment

The County should evaluate the risk associated with the Project for sensitive receptors (residences, businesses, hospitals, day-care facilities, health care facilities, etc.) in the area and mitigate any potentially significant risk to help limit exposure of sensitive receptors to emissions.

To determine potential health impacts on surrounding receptors (residences, businesses, hospitals, day-care facilities, health care facilities, etc.) a Prioritization and/or a Health Risk Assessment (HRA) should be performed for the Project. These health risk determinations should quantify and characterize potential Toxic Air Contaminants (TACs) identified by the Office of Environmental Health Hazard Assessment/California Air Resources Board (OEHHA/CARB) that pose a present or potential hazard to human health.

Health risk analyses should include all potential air emissions from the project, which include emissions from construction of the project, including multi-year construction, as well as ongoing operational activities of the project. Note, two common sources of TACs can be attributed to diesel exhaust emitted from heavy-duty off-road earth moving equipment during construction, and from ongoing operation of heavy-duty on-road trucks.

Prioritization (Screening Health Risk Assessment):
A "Prioritization" is the recommended method for a conservative screening-level health risk assessment. The Prioritization should be performed using the California Air Pollution Control Officers Association's (CAPCOA) methodology. Please contact the District for assistance with performing a Prioritization analysis.

The District recommends that a more refined analysis, in the form of an HRA, be performed for any project resulting in a Prioritization score of 10 or greater. This is because the prioritization results are a conservative health risk representation, while the detailed HRA provides a more accurate health risk evaluation.

Health Risk Assessment:
Prior to performing an HRA, it is strongly recommended that land use agencies/ project proponents develop and submit for District review a health risk modeling protocol that outlines the sources and methodologies that will be used to perform the HRA.

A development project would be considered to have a potentially significant health risk if the HRA demonstrates that the health impacts would exceed the District's established risk thresholds, which can be found here: https://ww2.valleyair.org/permitting/ceqa/.

A project with a significant health risk would trigger all feasible mitigation measures. The District strongly recommends that development projects that result in a significant health risk not be approved by the land use agency.

The District is available to review HRA protocols and analyses. For HRA submittals please provide the following information electronically to the District for review:

- HRA (AERMOD) modeling files
- HARP2 files
- Summary of emissions source locations, emissions rates, and emission factor calculations and methodologies.

For assistance, please contact the District's Technical Services Department by:

- E-Mailing inquiries to: hramodeler@valleyair.org
- Calling (559) 230-5900

Recommended Measure: Development projects resulting in TAC emissions should be located an adequate distance from residential areas and other sensitive receptors to prevent the creation of a significant health risk in accordance to CARB's Air Quality and Land Use Handbook: A Community Health Perspective located at https://ww2.arb.ca.gov/our-work/programs/resource-center/strategy-development/land-use-resources.

3) Ambient Air Quality Analysis

An Ambient Air Quality Analysis (AAQA) uses air dispersion modeling to determine if emissions increases from a project will cause or contribute to a violation of State or National Ambient Air Quality Standards. The District recommends an AAQA be performed for the Project if emissions exceed 100 pounds per day of any pollutant.

An AAQA uses air dispersion modeling to determine if emission increase from a project will cause or contribute to a violation of State or National Ambien Air Quality Standards. An acceptable analysis would include emissions from both project-specific permitted and non-permitted equipment and activities. The District recommends consultation with District staff to determine the appropriate model and input data to use in the analysis.

Specific information for assessing significance, including screening tools and modeling guidance, is available online at the District's website: https://ww2.valleyair.org/permitting/ceqa/.

4) Voluntary Emission Reduction Agreement

Criteria pollutant emissions are expected to result in emissions exceeding the District's significance thresholds, potentially resulting in a significant impact on air quality. When a project is expected to have a significant impact, the District recommends the DEIR also include a discussion on the feasibility of implementing a Voluntary Emission Reduction Agreement (VERA) for this Project.

A VERA is a mitigation measure by which the project proponent provides pound-for-pound mitigation of emissions increases through a process that develops, funds, and implements emission reduction projects, with the District serving a role of administrator of the emissions reduction projects and verifier of the successful mitigation effort. To implement a VERA, the project proponent and the District enter into a contractual agreement in which the project proponent agrees to mitigate project specific emissions by providing funds for the District's incentives programs. The funds are disbursed by the District in the form of grants for projects that achieve emission reductions. Thus, project-related impacts on air quality can be mitigated. Types of emission reduction projects that have been funded in the past include electrification of stationary internal combustion engines (such as agricultural irrigation pumps), replacing old heavy-duty trucks with new, cleaner, more efficient heavy-duty trucks, and replacement of agricultural equipment with the latest generation technologies.

In implementing a VERA, the District verifies the actual emission reductions that have been achieved as a result of completed grant contracts, monitors the emission reduction projects, and ensures the enforceability of achieved reductions. After the project is mitigated, the District certifies to the Lead Agency that the mitigation is completed, providing the Lead Agency with an enforceable mitigation measure demonstrating that project-related emissions have been mitigated. To assist the Lead Agency and project proponent in ensuring that the environmental document is compliant with CEQA, the District recommends the environmental document includes an assessment of the feasibility of implementing a VERA.

5) Industrial/Warehouse Emission Reduction Strategies

The District recommends the County incorporate emission reduction strategies that can reduce potential harmful health impacts, such as those listed below:

- Require cleanest available heavy-duty trucks and off-road equipment (see comment 7)
- Require HHD truck routing patterns that limit exposure of residential communities and sensitive receptors to emissions (see comment 6)
- Require minimization of heavy-duty truck idling (see comment 8)
- Require solid screen buffering trees, solid decorative walls, and/or other natural ground landscaping techniques are implemented along the property

line of adjacent sensitive receptors

- Orient loading docks away from sensitive receptors unless physically impossible
- Require loading docks a minimum of 500 feet away from the property line of the nearest truck loading bay opening, unless dock is exclusively used for electric trucks
- Incorporate signage and "pavement markings" to clearly identify on-site circulation patterns to minimize unnecessary on-site vehicle travel
- Require truck entries be located on streets of a higher commercial classification
- Locate and require truck entry, exit, and internal circulation away from sensitive receptors
- Prohibit Heavy-Duty diesel truck drive aisles from being used on sides of the building that are directly adjacent to a sensitive receptor property line
- Require a separate entrance for heavy-duty trucks accessible via a truck route, arterial road, major thoroughfare, or a local road that predominantly serves commercial oriented uses
- Require projects be designed to provide the necessary infrastructure to support use of zero-emissions on-road vehicles and off-road equipment (see comment 13)
- Require all building roofs are solar-ready
- Require all portions of roof tops that are not covered with solar panels are constructed to have light colored roofing material with a solar reflective index of greater than 78
- Ensure rooftop solar panels are installed and operated to supply 100% of the power needed to operate all non-refrigerated portions of the development project
- Install solar photovoltaic systems and associated battery storage on the project site
- Require power sources at loading docks for all refrigerated trucks have "plugin" capacity, which will eliminate prolonged idling while loading and unloading goods
- Incorporate bicycle racks and electric bike plug-ins
- Require the use of low volatile organic compounds (VOC) architectural and industrial maintenance coatings
- Designate an area during construction to charge electric powered construction vehicles and equipment, if temporary power is available
- Prohibit the use of non-emergency diesel-powered generators during construction
- Inform the project proponent of the incentive programs (e.g., Carl Moyer Program and Voucher Incentive Program) offered to reduce air emissions from the Project
- Ensure all landscaping be drought tolerant

6) Truck Routing

Truck routing involves the assessment of which roads Heavy Heavy-Duty (HHD) trucks take to and from their destination, and the emissions impact that the HHD trucks may have on residential communities and sensitive receptors. Since the Project consists of industrial warehouse development, there is expected to be an increase in truck trips in the area.

The District recommends the County evaluate HHD truck routing patterns for the Project, with the aim of limiting exposure of residential communities and sensitive receptors to emissions. This evaluation would consider the current truck routes, the quantity and type of each truck (e.g., Medium Heavy-Duty, HHD, etc.), the destination and origin of each trip, traffic volume correlation with the time of day or the day of the week, overall Vehicle Miles Traveled (VMT), and associated exhaust emissions. The truck routing evaluation would also identify alternative truck routes and their impacts on VMT and air quality.

7) Cleanest Available Heavy-Duty Trucks

The San Joaquin Valley will not be able to attain stringent health-based federal air quality standards without significant reductions in emissions from HHD trucks, the single largest source of NOx emissions in the San Joaquin Valley. Accordingly, to meet federal air quality attainment standards, the District's ozone and particulate matter attainment plans rely on a significant and rapid transition of HHD fleets to zero or near-zero emissions technologies.

Since the Project consists of industrial warehouse development, there is expected to be an increase in truck trips in the area. Since the Project is expected to exceed the District significance thresholds, the District recommends that the following measures be considered by the County to reduce Project-related operational emissions:

- *Recommended Measure*: Fleets associated with operational activities utilize the cleanest available HHD trucks, including zero and near-zero technologies.

- *Recommended Measure*: All on-site service equipment (cargo handling, yard hostlers, forklifts, pallet jacks, etc.) utilize zero-emissions technologies.

8) Reduce Idling of Heavy-Duty Trucks

The goal of this strategy is to limit the potential for localized PM2.5 and toxic air contaminant impacts associated with the idling of Heavy-Duty trucks. The diesel exhaust from idling has the potential to impose significant adverse health and environmental impacts.

Since the Project is expected to result in HHD truck trips, the District recommends the DEIR include measures to ensure compliance of the state anti-idling regulation (13 CCR § 2485 and 13 CCR § 2480) and discuss the importance of limiting the amount of idling, especially near sensitive receptors. In addition, the District recommends the County consider the feasibility of implementing a more stringent 3-minute idling restriction and requiring appropriate signage and enforcement of idling restrictions.

9) Electric On-Site Off-Road and On-Road Equipment

Since the development project includes Medium Industrial uses, the Project may have the potential to result in increased use of off-road equipment (e.g., forklifts) and on-road equipment (e.g., mobile yard trucks with the ability to move materials). The District recommends that the DEIR include requirements for project proponents to utilize electric or zero emission off-road and on-road equipment.

10) Vegetative Barriers and Urban Greening

There are residential units located southeast of the Project. The District suggests the County consider the feasibility of incorporating vegetative barriers and urban greening as a measure to further reduce air pollution exposure on sensitive receptors (e.g., residential units).

While various emission control techniques and programs exist to reduce air quality emissions from mobile and stationary sources, vegetative barriers have been shown to be an additional measure to potentially reduce a population's exposure to air pollution through the interception of airborne particles and the update of gaseous pollutants. Examples of vegetative barriers include, but are not limited to the following: trees, bushes, shrubs, or a mix of these. Generally, a higher and thicker vegetative barrier with full coverage will result in greater reductions in downwind pollutant concentrations. In the same manner, urban greening is also a way to help improve air quality and public health in addition to enhancing the overall beautification of a community with drought tolerant, low-maintenance greenery.

11)Clean Lawn and Garden Equipment in the Community

Since the Project consists of industrial development, gas-powered lawn and garden equipment have the potential to result in an increase of NOx and PM2.5 emissions. Utilizing electric lawn care equipment can provide residents with immediate economic, environmental, and health benefits. The District recommends the Project proponent consider the District's Clean Green Yard Machines (CGYM) program which provides incentive funding for replacement of existing gas powered lawn and garden equipment. More information on the District CGYM program and funding can be found at: https://ww2.valleyair.org/grants/clean-green-yard-machines-residential/ and https://ww2.valleyair.org/grants/zero-emission-landscaping-equipment-voucher-program/.

12)On-Site Solar Deployment

It is the policy of the State of California that renewable energy resources and zero-carbon resources supply 100% of retail sales of electricity to California end-use customers by December 31, 2045. While various emission control techniques and programs exist to reduce air quality emissions from mobile and stationary sources, the production of solar energy is contributing to improving air quality and public health. The District suggests that the County consider incorporating solar power systems as an emission reduction strategy for the Project.

13)Electric Infrastructure

The District recommends that the County require all nonresidential buildings be designed to provide electric infrastructure to support the use of on-road zero emissions vehicles, such as Medium-Heavy Duty trucks and HHD trucks associated with a warehouse project.

To support and accelerate the installation of electric vehicle charging equipment and development of required infrastructure, the District offers incentives to public agencies, businesses, and property owners of multi-unit dwellings to install electric charging infrastructure (Level 2 and 3 chargers). The purpose of the District's Charge Up! Incentive program is to promote clean air alternative-fuel technologies and the use of low or zero-emission vehicles. The District recommends that the County and project proponents install electric vehicle chargers at project sites, and at strategic locations.

Please visit https://ww2.valleyair.org/grants/charge-up for more information.

14)District Rules and Regulations

The District issues permits for many types of air pollution sources, and regulates some activities that do not require permits. A project subject to District rules and

regulations would reduce its impacts on air quality through compliance with the District's regulatory framework. In general, a regulation is a collection of individual rules, each of which deals with a specific topic. As an example, Regulation II (Permits) includes District Rule 2010 (Permits Required), Rule 2201 (New and Modified Stationary Source Review), Rule 2520 (Federally Mandated Operating Permits), and several other rules pertaining to District permitting requirements and processes.

The list of rules below is neither exhaustive nor exclusive. Current District rules can be found online at: https://ww2.valleyair.org/rules-and-planning/current-district-rules-and-regulations. To identify other District rules or regulations that apply to future projects, or to obtain information about District permit requirements, the project proponents are strongly encouraged to contact the District's Small Business Assistance (SBA) Office at (661) 392-5665.

14a) District Rules 2010 and 2201 - Air Quality Permitting for Stationary Sources

Stationary Source emissions include any building, structure, facility, or installation which emits or may emit any affected pollutant directly or as a fugitive emission. District Rule 2010 (Permits Required) requires operators of emission sources to obtain an Authority to Construct (ATC) and Permit to Operate (PTO) from the District. District Rule 2201 (New and Modified Stationary Source Review) requires that new and modified stationary sources of emissions mitigate their emissions using Best Available Control Technology (BACT).

This Project may be subject to District Rule 2010 (Permits Required) and Rule 2201 (New and Modified Stationary Source Review) and may require District permits. Prior to construction, the Project proponent should submit to the District an application for an ATC. For further information or assistance, the project proponent may contact the District's SBA Office at (661) 392-5665.

14b) District Rule 9510 - Indirect Source Review (ISR)

The Project is subject to District Rule 9510 because it will receive a project-level discretionary approval from a public agency and will equal or exceed 100,000 square feet of Heavy Industrial space.

The purpose of District Rule 9510 is to reduce the growth in both NOx and PM emissions associated with development and transportation projects from mobile and area sources; specifically, the emissions associated with the construction and subsequent operation of development projects. The ISR Rule requires developers to mitigate their NOx and PM emissions by incorporating clean air design elements into their projects. Should the proposed development project

clean air design elements be insufficient to meet the required emission reductions, developers must pay a fee that ultimately funds incentive projects to achieve off-site emissions reductions.

Per Section 5.0 of the ISR Rule, an Air Impact Assessment (AIA) application is required to be submitted no later than applying for project-level approval from a public agency. As of the date of this letter, the District has not received an AIA application for this Project. Please inform the project proponent to immediately submit an AIA application to the District to comply with District Rule 9510 so that proper mitigation and clean air design under ISR can be incorporated into the Project's design. One AIA application should be submitted for the entire Project.

Information about how to comply with District Rule 9510 can be found online at: https://ww2.valleyair.org/permitting/indirect-source-review-rule-overview

The AIA application form can be found online at: https://ww2.valleyair.org/permitting/indirect-source-review-rule-overview/forms-and-applications/

District staff is available to provide assistance and can be reached by phone at (559) 230-5900 or by email at ISR@valleyair.org.

14c) District Rule 9410 (Employer Based Trip Reduction)

The Project may be subject to District Rule 9410 (Employer Based Trip Reduction) if the project would result in employment of 100 or more "eligible" employees. District Rule 9410 requires employers with 100 or more "eligible" employees at a worksite to establish an Employer Trip Reduction Implementation Plan (eTRIP) that encourages employees to reduce single-occupancy vehicle trips, thus reducing pollutant emissions associated with work commutes. Under an eTRIP plan, employers have the flexibility to select the options that work best for their worksites and their employees.

Information about District Rule 9410 can be found online at: https://ww2.valleyair.org/compliance/rule-9410-employer-based-trip-reduction/.

For additional information, you can contact the District by phone at 559-230-6000 or by e-mail at etrip@valleyair.org

14d) District Rule 4601 (Architectural Coatings)

The Project may be subject to District Rule 4601 since it may utilize architectural coatings. Architectural coatings are paints, varnishes, sealers, or stains that are applied to structures, portable buildings, pavements or curbs.

The purpose of this rule is to limit VOC emissions from architectural coatings. In addition, this rule specifies architectural coatings storage, cleanup and labeling requirements. Additional information on how to comply with District Rule 4601 requirements can be found online at: https://ww2.valleyair.org/media/tkqjeusd/rule-4601.pdf

14e) District Regulation VIII (Fugitive PM10 Prohibitions)

The project proponent may be required to submit a Construction Notification Form or submit and receive approval of a Dust Control Plan prior to commencing any earthmoving activities as described in Regulation VIII, specifically Rule 8021 – *Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities.*

Should the project result in at least 1-acre in size, the project proponent shall provide written notification to the District at least 48 hours prior to the project proponents intent to commence any earthmoving activities pursuant to District Rule 8021 (Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities). Also, should the project result in the disturbance of 5-acres or more, or will include moving, depositing, or relocating more than 2,500 cubic yards per day of bulk materials, the project proponent shall submit to the District a Dust Control Plan pursuant to District Rule 8021 (Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities). For additional information regarding the written notification or Dust Control Plan requirements, please contact District Compliance staff at (559) 230-5950.

The application for both the Construction Notification and Dust Control Plan can be found online at: https://ww2.valleyair.org/media/fm3jrbsq/dcp-form.docx

Information about District Regulation VIII can be found online at: https://ww2.valleyair.org/dustcontrol

14f) Other District Rules and Regulations

The Project may also be subject to the following District rules: Rule 4102 (Nuisance) and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations).

15)District Comment Letter

The District recommends that a copy of the District's comments be provided to the Project proponent.

If you have any questions or require further information, please contact Matt Crow by e-mail at Matt.Crow@valleyair.org or by phone at (559) 230-5931.

Sincerely,



For: Mark Montelongo
Director of Policy and Government Affairs

Nicole Menchaca

From: EJ <EJ@doj.ca.gov>
Sent: Monday, April 7, 2025 9:07 AM
To: Nicole Menchaca
Subject: Airport Commerce Center Industrial Project - CEQANet #2025030498 - Correction
Attachments: warehouse-best-practices.pdf; 20250407 Kern County PD #2025030498.pdf

CAUTION: This email originated from outside of the organization. Do not click links, open attachments, or provide information unless you recognize the sender and know the content is safe.

Dear Ms. Menchaca,

On behalf of the California Department of Justice's Bureau of Environmental Justice, please see the attached letter regarding the Airport Commerce Center Industrial Project.

Sincerely,

Bureau of Environmental Justice

https://oag.ca.gov/environment/justice

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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

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[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

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[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.

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[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.

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

April 7, 2025

Nicole Menchaca, Supervising Planner
Kern County Planning and Natural Resources Department
Public Services Building
2700 M Street, Suite 100
Bakersfield, CA 93301

RE: Airport Commerce Center Industrial Project, SCH #2025030498

Dear Ms. Menchaca:

Thank you for the opportunity to provide comments on the Notice of Preparation for the Airport Commerce Center Industrial 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.

Nicole Menchaca

From: Haney, Kevin@DOC <Kevin.Haney@conservation.ca.gov>
Sent: Thursday, March 27, 2025 8:14 AM
To: Nicole Menchaca
Subject: CSWR: Airport Commerce Center Industrial Project
Attachments: Nichole Menchaca_1013229_20250326_093232_CSWR Report_Signed.pdf

CAUTION: This email originated from outside of the organization. Do not click links, open attachments, or provide information unless you recognize the sender and know the content is safe.

Good morning,

Attached is the CSWR Report for the Airport Commerce Center Industrial Project in Bakersfield.

Kevin Haney
Associate Oil and Gas Engineer

California Department of Conservation
Geologic Energy Management Division
11000 River Run Blvd., Bakersfield, CA 93311
T: (661) 381-8441
E: kevin.haney@conservation.ca.gov

Docusign Envelope ID: D8439E12-C768-4841-B257-C7929A7A614D

California
Department of Conservation
Geologic Energy Management Division

Gavin Newsom, Governor
Jennifer Lucchesi, Director
715 P Street, MS 1803
Sacramento, CA. 95814
T: (916) 445-5986

03/26/2025

Nichole Menchaca
2700 M Street, Suite 100, Bakersfield, CA 93301, USA
huiskenn@kerncounty.com

Construction Site Well Review (CSWR) ID: 1013229

Assessor Parcel Number(s): 48304032, 48304033, 48304042, 48304043, 48304045, 48304046

Property Owner(s): ACC Bakersfield JV LLC

Project Location Address: N of MerleHaggard between Airport Dr & Landings Wy Bakersfield, California 93312

Project Title: Airport Commerce Center Industrial Project

Public Resources Code (PRC) § 3208.1 establishes well reabandonment responsibility when a previously plugged and abandoned well will be impacted by planned property development or construction activities. Local permitting agencies, property owners, and/or developers should be aware of, and fully understand, that significant and potentially dangerous issues may be associated with development near oil, gas, and geothermal wells.

The California Geologic Energy Management Division (CalGEM) has received and reviewed the above referenced project dated 3/24/2025. To assist local permitting agencies, property owners, and developers in making wise land use decisions regarding potential development near oil, gas, or geothermal wells, the Division provides the following well evaluation.

The project is located in Kern County, within the boundaries of the following fields:

Kern Front

Our records indicate there are 2 known oil or gas wells located within the project boundary as identified in the application.

- Number of wells Not Abandoned to Current Division Requirements as Prescribed by Law and Projected to Be Built Over or Have Future Access Impeded by this project: 0

- Number of wells Not Abandoned to Current Division Requirements as Prescribed by Law and Not Projected to Be Built Over or Have Future Access Impeded by this project: 1

- Number of wells Abandoned to Current Division Requirements as Prescribed by Law and Projected to Be Built Over or Have Future Access Impeded by this project: 0

- Number of wells Abandoned to Current Division Requirements as Prescribed by Law and Not Projected to Be Built Over or Have Future Access Impeded by this project: 1

The Division categorically advises against building over, or in any way impeding access to, oil, gas, or geothermal wells. Impeding access to a well could result in the need to remove any structure or obstacle that prevents or impedes access including, but not limited to, buildings, housing, fencing, landscaping, trees, pools, patios, sidewalks, roadways, and decking. Maintaining sufficient access is considered the ability for a well servicing unit and associated necessary equipment to reach a well from a public street or access way, solely over the parcel on which the well is located. A well servicing unit, and any necessary equipment, should be able to pass unimpeded along and over the route, and should be able to access the well without disturbing the integrity of surrounding infrastructure.

There are no guarantees a well abandoned in compliance with current Division requirements as prescribed by law will not start leaking in the future. It always remains a possibility that any well may start to leak oil, gas, and/or water after abandonment, no matter how thoroughly the well was plugged and abandoned. The Division acknowledges wells plugged and abandoned to the most current Division requirements as prescribed by law have a lower probability of leaking in the future, however there is no guarantees that such abandonments will not leak.

The Division advises that all wells identified on the development parcel prior to, or during, development activities be tested for liquid and gas leakage. Surveyed locations should be provided to the Division in Latitude and Longitude, NAD 83 decimal format. The Division expects any wells found leaking to be reported to it immediately.

Failure to plug and reabandon the well may result in enforcement action, including an order to perform reabandonment well work, pursuant to PRC § 3208.1, and 3224.

PRC § 3208.1 give the Division the authority to order or permit the re-abandonment of any well where it has reason to question the integrity of the previous abandonment, or if the well is not accessible or visible. Responsibility for re-abandonment costs may be affected by the choices made by the local

permitting agency, property owner, and/or developer in considering the general advice set forth in this letter. The PRC continues to define the person or entity responsible for reabandonment as:

1. The property owner - If the well was plugged and abandoned in conformance with Division requirements at the time of abandonment, and in its current condition does not pose an immediate danger to life, health, and property, but requires additional work solely because the owner of the property on which the well is located proposes construction on the property that would prevent or impede access to the well for purposes of remedying a currently perceived future problem, then the owner of the property on which the well is located shall obtain all rights necessary to reabandon the well and be responsible for the reabandonment.

2. The person or entity causing construction over or near the well - If the well was plugged and abandoned in conformance with Division requirements at the time of plugging and abandonment, and the property owner, developer, or local agency permitting the construction failed either to obtain an opinion from the supervisor or district deputy as to whether the previously abandoned well is required to be reabandoned, or to follow the advice of the supervisor or district deputy not to undertake the construction, then the person or entity causing the construction over or near the well shall obtain all rights necessary to reabandon the well and be responsible for the reabandonment.

3. The party or parties responsible for disturbing the integrity of the abandonment - If the well was plugged and abandoned in conformance with Division requirements at the time of plugging and abandonment, and after that time someone other than the operator or an affiliate of the operator disturbed the integrity of the abandonment in the course of developing the property, then the party or parties responsible for disturbing the integrity of the abandonment shall be responsible for the reabandonment.

No well work may be performed on any oil, gas, or geothermal well without written approval from the Division. Well work requiring approval includes, but is not limited to, mitigating leaking gas or other fluids from abandoned wells, modifications to well casings, and/or any other re-abandonment work. The Division also regulates the top of a plugged and abandoned well's minimum and maximum depth below final grade. CCR §1723.5 states well casings shall be cut off at least 5 feet but no more than 10 feet below grade. If any well needs to be lowered or raised (i.e. casing cut down or casing riser added) to meet this regulation, a permit from the Division is required before work can start.

The Division makes the following additional recommendations to the local permitting agency, property owner, and developer:

1. To ensure that present and future property owners are aware of (a) the existence of all wells located on the property, and (b) potentially significant issues associated with any improvements

near oil or gas wells, the Division recommends that information regarding the above identified well(s), and any other pertinent information obtained after the issuance of this letter, be communicated to the appropriate county recorder for inclusion in the title information of the subject real property.

2. The Division recommends that any soil containing hydrocarbons be disposed of in accordance with local, state, and federal laws. Please notify the appropriate authorities if soil containing significant amounts of hydrocarbons is discovered during development.

As indicated in PRC § 3106, the Division has statutory authority over the drilling, operation, maintenance, and abandonment of oil, gas, and geothermal wells, and attendant facilities, to prevent, as far as possible, damage to life, health, property, and natural resources; damage to underground oil, gas, and geothermal deposits; and damage to underground and surface waters suitable for irrigation or domestic purposes. In addition to the Division's authority to order work on wells pursuant to PRC §§ 3208.1 and 3224, it has authority to issue civil and criminal penalties under PRC §§ 3236, 3236.5, and 3359 for violations within the Division's jurisdictional authority. The Division does not regulate grading, excavations, or other land use issues.

If during development activities, any wells are encountered that were not part of this review, the property owner is expected to immediately notify the Division's construction site well review engineer in the Inland district office, and file for Division review an amended site plan with well casing diagrams. The District office will send a follow-up well evaluation letter to the property owner and local permitting agency.

Should you have any questions, please contact me at (661) 342-9993 or via email at Cristian.Garcia@conservation.ca.gov.

Sincerely,

Cristian Garcia
Cristian Garcia
Senior Oil and Gas Engineer

cc: Nichole Menchaca - Submitter

Wells Not Abandoned to Current Division Requirements as Prescribed by Law & Not Projected to be Built Over or Have Future Access Impeded

The wells listed below are not abandoned to current Division requirements as prescribed by law, and based upon information provided, are not projected to be built over or have future access impeded.

API	Well Designation	Operator	Well Evaluations
0402910466	35-17	Phillips Petroleum Company	According to our records, the well is not plugged and abandoned to current division standards: Top of Basal Etchegoin zone isolation plug is not present (CCR §1723.1)

Docusign Envelope ID: D8439E12-C768-4841-B257-C7929A7A614D

Wells Abandoned to Current Division Requirements as Prescribed by Law & Not Projected to be Built Over or Have Future Access Impeded

The wells listed below are abandoned to current Division requirements as prescribed by law, and based upon information provided, are not projected to be built over or have future access impeded.

API	Well Designation	Operator	Well Evaluations
0402910465	35-16	Phillips Petroleum Company	According to our records, the well is plugged and abandoned consistent with current PRC and CCR.

Nicole Menchaca

From: CalGEMCentralCSWR@DOC <CalGEMCentralCSWR@conservation.ca.gov>
Sent: Monday, April 21, 2025 2:26 PM
To: Nicole Menchaca
Cc: Jeffries, Randall@DOC; CalGEMCentralCSWR@DOC
Subject: CSWR_ Airport Commerce Center Industrial Project by ACC Bakersfield JV, LLC
Attachments: CSWR_Airport Commerce Center Industrial Project_signed.pdf

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Good afternoon,

We would like to inform you of an update to our process regarding construction site well reviews.

Effective immediately, the Division will no longer be reviewing the abandonment of oil wells as part of this process. Instead, a formal letter will be attached to all requests identifying oil wells on the premises and stating that it is our recommendation to not impede access to any wells that have been abandoned and buried. Furthermore, all wells that have access impeded or are to be built over should be evaluated by a qualified petroleum professional. If it is deemed that any well(s) requires abandonment or re-abandonment the responsible party must submit a Notice of Intention to the Division through WellSTAR.

Thank you,



Construction Site Well Review Team
California Department of Conservation
CalGEM | Central District
11000 River Run Blvd. Bakersfield, CA 93311
E: CalGEMCentralCSWR@conservation.ca.gov

To ensure efficient communication and expedite the review process, we strongly recommend submitting your CSWRs electronically to the CalGEM Central CSWR email address: CalGEMCentralCSWR@conservation.ca.gov
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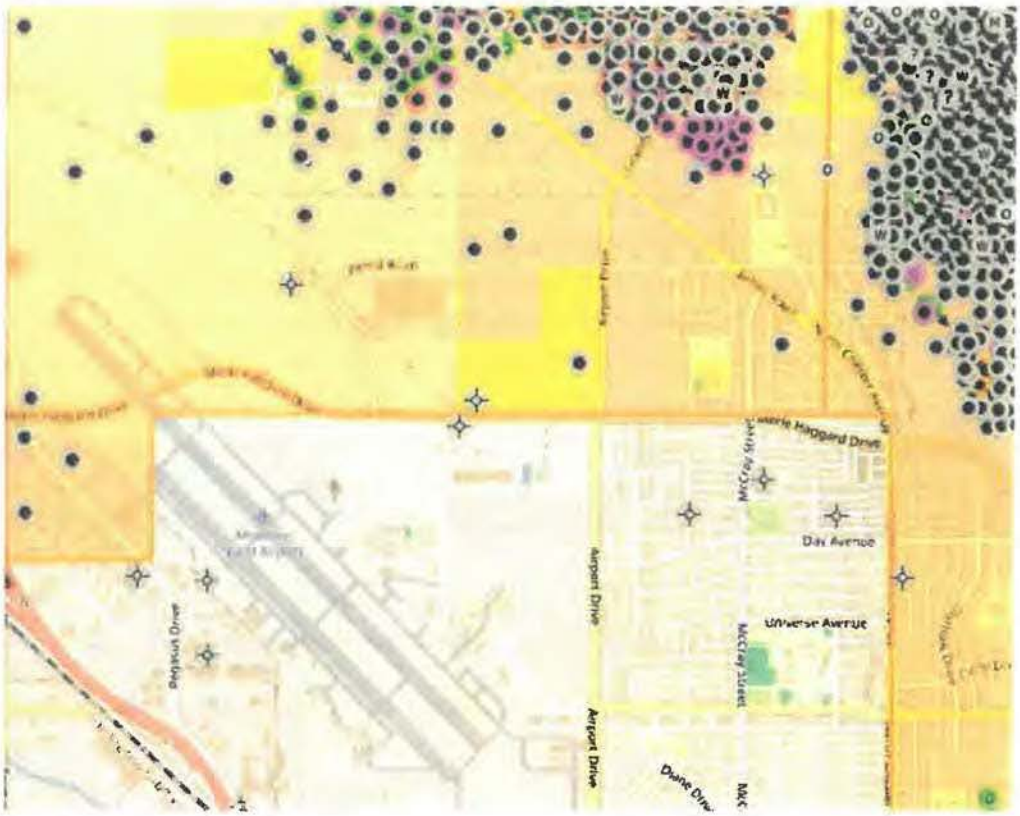
From: Jeffries, Randall@DOC <Randall.Jeffries@conservation.ca.gov>
Sent: Friday, March 21, 2025 2:05 PM
To: Kimber, Jeff@DOC <Jeff.Kimber@conservation.ca.gov>
Cc: Jeffries, Randall@DOC <Randall.Jeffries@conservation.ca.gov>
Subject: FW: CEQA Review: Airport Commerce Center Industrial Project by ACC Bakersfield JV, LLC



SCH Number
2025030498
https://ceqanet.opr.ca.gov/2025030498
Lead Agency
Kern County
Document Title
Airport Commerce Center Industrial Project by ACC Bakersfield JV, LLC
Document Type
NOP - Notice of Preparation of a Draft EIR
Received
3/12/2025
Present Land Use
Undeveloped Land/ Vacant Land/Zoning - M-1 PD H (Light Industrial - Precise Development Combining - Airport Approach Height Combining), M-2 PD H (Medium Industrial - Precise Development Combining - Airport Approach Height Combining), and FPP (Floodplain Primary)/General Plan Designation - SI (Service Industrial) and GC (General Commercial)
Document Description
The Airport Commerce Center Industrial Project is a proposal by ACC Bakersfield JV, LLC for the construction and operation of an industrial warehouse facility with associated quick-serve restaurants. The proposed project would include the construction of four single-story warehouses totaling approximately 1,505,440 square-feet (including 150,544 square-feet for dedicated office space), two single-story quick-serve restaurants totaling 9,410 square-feet, and related site improvements. The proposed project is located on six (6) parcels totaling approximately 109 acres (Assessor's Parcel Numbers (APN's), 483-040-32, 483-040-33, 483-040-42, 483-040-43, 483-040-45, and 483-040-46) of privately owned land located in the Oildale area of unincorporated Bakersfield in central Kern County, California.

If your Division identifies a potential program impact from this project, please provide your comments to the lead agency by **APRIL 11, 2025**. Send a copy of your comment to the State Clearinghouse at

state.clearinghouse@opr.ca.gov and include OLRA@conservation.ca.gov , jan.perez@conservation.ca.gov so that we can file your comment in our records. Be sure to include the project number (SCH #) on all correspondence.

Randall "Randy" Jeffries

Oil and Gas Program Analyst | CEQA Unit
Geologic Energy Management

California Department of Conservation
715 P. Street, MS 1803, Sacramento, CA 95814
C: (916) 917-3683
E: Randall.Jeffries@conservation.ca.gov



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California
Department of Conservation
Geologic Energy Management Division

Gavin Newsom, Governor
Jennifer Lucchesi, Director
715 P Street, MS 1803
Sacramento, CA. 95814
T: (916) 445-5986

4/15/2025

Kern County Planning and Natural Resources Department
Nicole Menchaca
2700 M Street, Suite 100, Bakersfield, CA 93301
huiskenn@kerncounty.com

Assessor Parcel Number(s): *48304032, 48304033, 48304042, 48304043, 48304045, 48304046*

Property Owner(s): *Bryce Holman - ACC Bakersfield JV, LLC*

Project Location Address: *Merle Haggard Drive and Airport Drive,*

Oildale, CA 93308

Project Title: *Airport Commerce Center Industrial Project*

Public Resources Code (PRC) § 3208.1 establishes re-abandonment responsibility when previously plugged and abandoned oil, gas or geothermal wells will be impacted by planned property development or construction activities. Local permitting agencies, property owners, and/or developers should be aware of, and fully understand, that significant and potentially dangerous issues may be associated with development near previously abandoned oil, gas, and geothermal wells.

The California Geologic Energy Management Division (CalGEM) has received the above-referenced project dated *3/12/2025*. To assist local permitting agencies, property owners, and developers in making safe and practical land use decisions regarding potential development near oil, gas, or geothermal wells, the Division provides a table of the wells within the parcel boundary or in its vicinity, based on the Division's Well Finder database (link found at the bottom of this letter).

The Division categorically advises against building over, or in any way impeding access to, oil,

Docusign Envelope ID: C7E93B3F-5ED8-4CC1-BC93-F93C1B51A6D6

gas, or geothermal wells. Impeding access to a well could result in the need to remove any structure or obstacle that prevents or impedes access including, but not limited to, buildings, housing, fencing, landscaping, trees, pools, patios, sidewalks, roadways, and decking at the landowner's expense if there is a need to access a well. Maintaining sufficient access is considered the ability for a well servicing unit and associated necessary equipment (consisting of well servicing rig, pumping equipment, pipe trailer) to reach a well from a public street or access way, solely over the parcel on which the well is located. A well servicing unit, and any necessary equipment, should be able to pass unimpeded along and over the route, and should be able to access the well without disturbing the integrity of surrounding infrastructure. Impermeable barriers such as asphalt, concrete, and plastic may trap hazardous gases and liquids underneath and could create a safety hazard if built over a well that later develops a leak.

The Division recommends that any well for which access is impeded or built over, against the Division's advice, should be evaluated by a qualified petroleum professional for compliance with the statutory objectives of isolating all hydrocarbon-bearing strata; protecting underground and surface waters; prevention of subsequent damage to life, health, property, and other resources; and prevention of loss of oil, gas, or reservoir energy. The Division recommends that wells that do not meet these standards are abandoned or re-abandoned prior to construction. The well information can be accessed through https://maps.conservation.ca.gov/doggr/wellfinder/. Public Resources Code (PRC) § 3208, subdivision (a), provides the primary statutory authority for the Division to oversee adequate abandonment of wells. Additionally, the Division has developed the regulatory guidance for operators to be followed during well abandonment, which are listed within California Code of Regulation, title 14 (CCR) § 1723 and associated sub-sections (for onshore wells), and § 1745 and associated sub-sections (for offshore wells).

There are no guarantees a well abandoned in compliance with current Division requirements as prescribed by law will not start leaking in the future. Due to the inability to predict all subsurface conditions or changes, it always remains a possibility that any well may start to leak oil, gas, and/or water after abandonment, no matter how thoroughly the well was plugged and abandoned. The Division acknowledges wells plugged and abandoned to the most current Division requirements as prescribed by law have a lower probability of leaking in the future, however there is no guarantees that such abandoned wells will not leak.

The Division advises that all wells identified on the development parcel prior to, or during, development activities be tested for liquid and gas leakage. Surveyed locations in Latitude and Longitude, NAD 83 decimal format, and leak testing results should be provided to the Division. The Division expects any wells found leaking to be reported to the Division immediately.

PRC § 3208.1 gives the Division the authority to order or permit the re-abandonment of any well

where it has reason to question the integrity of the previous abandonment. Responsibility for re-abandonment costs may be affected by the choices made by the local permitting agency, property owner, and/or developer in considering the general advice set forth in this letter. The PRC continues to define the person or entity responsible for re-abandonment as:

1. The property owner - If the well was plugged and abandoned in conformance with Division requirements at the time of abandonment, and in its current condition does not pose an immediate danger to life, health, and property, but requires additional work solely because the owner of the property on which the well is located proposes construction on the property that would prevent or impede access to the well for purposes of remedying a currently perceived future problem, then the owner of the property on which the well is located shall obtain all rights necessary to re-abandon the well and be responsible for the re-abandonment.

2. The person or entity causing construction over or near the well - If the well was plugged and abandoned in conformance with Division requirements at the time of plugging and abandonment, and the property owner, developer, or local agency permitting the construction failed either to obtain an opinion from the supervisor or district deputy as to whether the previously abandoned well is required to be re-abandoned, or to follow the advice of the supervisor or district deputy not to undertake construction that impedes access, then the person or entity causing the construction over or near the well shall obtain all rights necessary to re-abandon the well and be responsible for the re-abandonment.

3. The party or parties responsible for disturbing the integrity of the abandonment - If the well was plugged and abandoned in conformance with Division requirements at the time of plugging and abandonment, and after that time someone other than the operator or an affiliate of the operator disturbed the integrity of the abandonment in the course of developing the property, then the party or parties responsible for disturbing the integrity of the abandonment shall be responsible for the re-abandonment.

Should any wells require abandonment or re-abandonment, the responsible party must submit a Notice of Intention (NOI) to the Division through WellSTAR. The NOI form can be accessed in the 'Plugging and Abandonment' section of the following link: https://www.conservation.ca.gov/calgem/for_operators. No well work may be performed on any oil, gas, or geothermal well without written approval from the Division. Well work requiring approval includes, but is not limited to, mitigating leaking gas or other fluids from abandoned wells, modifications to well casings, and/or any other re-abandonment work. The Division also regulates the top of a plugged and abandoned well's minimum and maximum depth below final grade. CCR §1723.5 states well casings shall be cut off at least 5 feet but no more than 10 feet below the surface of the ground. If any well needs to be lowered or raised (i.e. casing cut down

or casing riser added) to meet this regulation, a permit from the Division is required before work can start.

The Division makes the following additional recommendations to the local permitting agency, property owner, and developer:

1. To ensure that present and future property owners are aware of (a) the existence of all wells located on the property, and (b) potentially significant issues associated with any improvements near oil or gas wells, the Division recommends that information regarding the above identified well(s), and any other pertinent information obtained after the issuance of this letter, be communicated to the appropriate county recorder for inclusion in the title information of the subject real property.

2. The Division recommends that any soil containing hydrocarbons be disposed of in accordance with local, state, and federal laws. Please notify the appropriate authorities if soil containing significant amounts of hydrocarbons is discovered during development.

As indicated in PRC § 3106, the Division has statutory authority over the drilling, operation, maintenance, and abandonment of oil, gas, and geothermal wells, and attendant facilities, to prevent, as far as possible, damage to life, health, property, and natural resources; damage to underground oil, gas, and geothermal deposits; and damage to underground and surface waters suitable for irrigation or domestic purposes. In addition to the Division's authority to order work on wells pursuant to PRC §§ 3208.1 and 3224, it has authority to issue civil and criminal penalties under PRC §§ 3236, 3236.5, and 3359 for violations within the Division's jurisdictional authority. The Division does not regulate grading, excavations, or other land use issues.

Should you have any questions, or if any wells are encountered that were not part of this letter, contact CalGEM at *(661) 322-4031* or via email at calgemcentralcswr@conservation.ca.gov.

Sincerely,

Jeff Kimber

Jeff Kimber
Supervising Oil and Gas Engineer

cc: *Robert Revelo* - Plan Checker

The wells listed below are reported to be located within and nearby the parcel boundary, and may have future access impeded:

No.	API	Well Designation
1	0402910465	35-16
2	0402910466	35-17

Nicole Menchaca

From: CalGEMCentralCSWR@DOC <CalGEMCentralCSWR@conservation.ca.gov>
Sent: Tuesday, April 22, 2025 12:19 PM
To: Nicole Menchaca
Cc: Jeffries, Randall@DOC; state.clearinghouse@opr.ca.gov; OLRA@DOC; Perez, Jan@DOC; CalGEMCentralCSWR@DOC
Subject: CSWR_ Airport Commerce Center Industrial Project by ACC Bakersfield JV, LLC
Attachments: CSWR_Airport Commerce Center Industrial Project_signed.pdf

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Good afternoon,

We would like to inform you of an update to our process regarding construction site well reviews.

Effective immediately, the Division will no longer be reviewing the abandonment of oil wells as part of this process. Instead, a formal letter will be attached to all requests identifying oil wells on the premises and stating that it is our recommendation to not impede access to any wells that have been abandoned and buried. Furthermore, all wells that have access impeded or are to be built over should be evaluated by a qualified petroleum professional. If it is deemed that any well(s) requires abandonment or re-abandonment the responsible party must submit a Notice of Intention to the Division through WellSTAR.

Thank you,

Construction Site Well Review Team
California Department of Conservation
CalGEM | Central District
11000 River Run Blvd. Bakersfield, CA 93311
E: CalGEMCentralCSWR@conservation.ca.gov

To ensure efficient communication and expedite the review process, we strongly recommend submitting your CSWRs electronically to the CalGEM Central CSWR email address: CalGEMCentralCSWR@conservation.ca.gov
CONFIDENTIALITY NOTICE: This communication with its contents may contain confidential and/or legally privileged information. It is solely for the use of the intended recipient(s). Unauthorized interception, review, use or disclosure is prohibited and may violate applicable laws including the Electronic Communications Privacy Act. If you are not the intended recipient, please contact the sender and destroy all copies of the communication

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California
Department of Conservation
Geologic Energy Management Division

Gavin Newsom, Governor
Jennifer Lucchesi, Director
715 P Street, MS 1803
Sacramento, CA. 95814
T: (916) 445-5986

4/15/2025

Kern County Planning and Natural Resources Department
Nicole Menchaca
2700 M Street, Suite 100, Bakersfield, CA 93301
huiskenn@kerncounty.com

Assessor Parcel Number(s): *48304032, 48304033, 48304042, 48304043, 48304045, 48304046*

Property Owner(s): *Bryce Holman - ACC Bakersfield JV, LLC*

Project Location Address: *Merle Haggard Drive and Airport Drive,*

Oildale, CA 93308

Project Title: *Airport Commerce Center Industrial Project*

Public Resources Code (PRC) § 3208.1 establishes re-abandonment responsibility when previously plugged and abandoned oil, gas or geothermal wells will be impacted by planned property development or construction activities. Local permitting agencies, property owners, and/or developers should be aware of, and fully understand, that significant and potentially dangerous issues may be associated with development near previously abandoned oil, gas, and geothermal wells.

The California Geologic Energy Management Division (CalGEM) has received the above-referenced project dated *3/12/2025*. To assist local permitting agencies, property owners, and developers in making safe and practical land use decisions regarding potential development near oil, gas, or geothermal wells, the Division provides a table of the wells within the parcel boundary or in its vicinity, based on the Division's Well Finder database (link found at the bottom of this letter).

The Division categorically advises against building over, or in any way impeding access to, oil,

gas, or geothermal wells. Impeding access to a well could result in the need to remove any structure or obstacle that prevents or impedes access including, but not limited to, buildings, housing, fencing, landscaping, trees, pools, patios, sidewalks, roadways, and decking at the landowner's expense if there is a need to access a well. Maintaining sufficient access is considered the ability for a well servicing unit and associated necessary equipment (consisting of well servicing rig, pumping equipment, pipe trailer) to reach a well from a public street or access way, solely over the parcel on which the well is located. A well servicing unit, and any necessary equipment, should be able to pass unimpeded along and over the route, and should be able to access the well without disturbing the integrity of surrounding infrastructure. Impermeable barriers such as asphalt, concrete, and plastic may trap hazardous gases and liquids underneath and could create a safety hazard if built over a well that later develops a leak.

The Division recommends that any well for which access is impeded or built over, against the Division's advice, should be evaluated by a qualified petroleum professional for compliance with the statutory objectives of isolating all hydrocarbon-bearing strata; protecting underground and surface waters; prevention of subsequent damage to life, health, property, and other resources; and prevention of loss of oil, gas, or reservoir energy. The Division recommends that wells that do not meet these standards are abandoned or re-abandoned prior to construction. The well information can be accessed through https://maps.conservation.ca.gov/doggr/wellfinder/. Public Resources Code (PRC) § 3208, subdivision (a), provides the primary statutory authority for the Division to oversee adequate abandonment of wells. Additionally, the Division has developed the regulatory guidance for operators to be followed during well abandonment, which are listed within California Code of Regulation, title 14 (CCR) § 1723 and associated sub-sections (for onshore wells), and § 1745 and associated sub-sections (for offshore wells).

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where it has reason to question the integrity of the previous abandonment. Responsibility for re-abandonment costs may be affected by the choices made by the local permitting agency, property owner, and/or developer in considering the general advice set forth in this letter. The PRC continues to define the person or entity responsible for re-abandonment as:

1. The property owner - If the well was plugged and abandoned in conformance with Division requirements at the time of abandonment, and in its current condition does not pose an immediate danger to life, health, and property, but requires additional work solely because the owner of the property on which the well is located proposes construction on the property that would prevent or impede access to the well for purposes of remedying a currently perceived future problem, then the owner of the property on which the well is located shall obtain all rights necessary to re-abandon the well and be responsible for the re-abandonment.

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The Division makes the following additional recommendations to the local permitting agency, property owner, and developer:

1. To ensure that present and future property owners are aware of (a) the existence of all wells located on the property, and (b) potentially significant issues associated with any improvements near oil or gas wells, the Division recommends that information regarding the above identified well(s), and any other pertinent information obtained after the issuance of this letter, be communicated to the appropriate county recorder for inclusion in the title information of the subject real property.

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Should you have any questions, or if any wells are encountered that were not part of this letter, contact CalGEM at *(661) 322-4031* or via email at calgemcentralcswr@conservation.ca.gov.

Sincerely,

Jeff Kimber

Jeff Kimber
Supervising Oil and Gas Engineer

cc: *Robert Revelo* - Plan Checker

The wells listed below are reported to be located within and nearby the parcel boundary, and may have future access impeded:

No.	API	Well Designation
1	0402910465	35-16
2	0402910466	35-17

Nicole Menchaca

From: Jonathan Montano <jonathan@mitchtsailaw.com>
Sent: Tuesday, March 25, 2025 5:21 PM
To: Nicole Menchaca
Cc: Omar Corona
Subject: Interested Parties Request for [County of Kern, Airport Commerce Center Industrial Project] PP24405 GPA No. 5, Map 81-35; ZCC No. 46, Map 81-35; PD No. 36, Map 81-35; ZV No. 7, Map 81-35; Nonsummary Vacation, Map 81-35

CAUTION: This email originated from outside of the organization. Do not click links, open attachments, or provide information unless you recognize the sender and know the content is safe.

Good afternoon,

I am reaching out to respectfully request that the following emails and address be added to the interested party noticing list for the AIrport Commerce Center Industrial Project:

omarc@mitchtsailaw.com
info@mitchtsailaw.com

139 S. Hudson Avenue
Suite 200
Pasadena, CA 91101

Please confirm when the above has been added to the noticing list.

Thank you!

--

Jonathan Montano
Paralegal
Mitchell M. Tsai Law Firm - *Environmental & Land Use Litigation*
139 South Hudson Avenue Suite 200
Pasadena, CA 91101
Phone: (626) 314-3821
Fax: (626) 389-5414
Email: jonathan@mitchtsailaw.com
Website: https://www.mitchtsailaw.com

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Nicole Menchaca

From: Stephen Chavira
Sent: Tuesday, March 25, 2025 4:13 PM
To: Nicole Menchaca
Cc: Kyle Perez; Cesar Ayon; Paul Candelaria
Subject: Airport Commerce Center Industrial Project
Attachments: Airport Commerce Center Industrial Project to Planning.pdf

Good Afternoon Nicole,

Please see the attached comments for the Airport Commerce Center Industrial Project, thank you.

Stephen C. Chavira
Kern County Public Works Dept
2700 M Street
Bakersfield, CA 93301
(661) 862-5115

Office Memorandum

To: Lorelei Oviatt, Director
Planning and Natural Resources Department
Attn: Nicole Menchaca, Supervising Planner

March 24, 2025

From: Cesar Ayon, Engineering Manager CA
Public Works Department/Development Review Division

Subject: Airport Commerce Center Industrial Project
Location: The project sight is located on the north side of Merle Haggard Drive between Airport Drive and Landings Way in the Oildale area of unincorporated Bakersfield.

Development Review Division

This Division has reviewed the subject project and has no comment.

Thank you for the opportunity to comment on this project. If you have any questions or comments, please contact Rodd Parke of this Division at (661) 862-8848.

Floodplain Management Division

Our section has reviewed the attached subject documents and has the following comments:

The runoff of storm water from the site will be increased due to the increase in impervious surface generated by the proposed development.

The subject property is subject to flooding.

Therefore, this section recommends the following be included as Conditions of Approval for this project:

The applicant shall provide a plan for the disposal of drainage waters originating on site and from adjacent road right-of-ways (if required), subject to approval of the Public Works Department, per the Kern County Development Standards.

Associated flood hazard requirements will need to be incorporated into the design of this project per the Kern County Floodplain Management Ordinance.

Thank you for the opportunity to comment on this project. If you have any questions or comments, please contact Brian Blaise of this Division at (661) 862-5098.

Sewer and Water Division

This Division has reviewed the subject project and has no comment.

Thank you for the opportunity to comment on this project. If you have any questions or comments, please contact Kyle Perez of this Division at (661) 862-8852.

CSA Division

This Division has reviewed the subject project and has no comment.

Thank you for the opportunity to comment on this project. If you have any questions or comments, please contact Miguel Munoz of this Division at (661) 862-8908.

KCSOS
Kern County Superintendent of Schools
Office of John G. Mendiburu, Ed.D. — Advocates For Children

RECEIVED
MAR 25 2025
Kern County Planning & Natural Resources Dept.

March 21, 2025

Kern County Planning Department
Attn: Nicole Menchaca
2700 M Street, Suite 100
Bakersfield, CA 93301

Our File No.: CO25-0033

RE: DEVELOPER FEES FOR: Draft EIR Airport Commerce Center Industrial Project; Map No.81-35 (North side of Merle Haggard Dr., between Airport Dr. and Landings Way)

Dear Ms. Menchaca,

This office represents the Beardsley Elementary and Kern High School Districts with regard to the imposition of school facility fees and appreciates the opportunity to respond on behalf of the districts regarding the proposed project. This letter is limited to addressing the possible effects which the project might have on school facilities created by students attributable to the project. It is not intended to address other possible environmental concerns which might be identified by the district(s) after reviewing it.

It is our determination that the above-mentioned Notice of Preparation of a Draft Environmental Impact Report for the Airport Commerce Center Industrial Project proposing the construction of four single story warehouses, two single story quick serve restaurants and site improvements to include (a) General Plan Amendment No. 5 of the Metropolitan Bakersfield General Plan map code designation GC (General Commercial) to SI (Service Industrial on approximately 13.76-acres; (b) Zone Classification Change No. 46 from M-1 PD H (Light Industrial Precise Development Combining – Airport Approach Height Combining) to M-2 PD H (Medium Industrial Precise Development Combining – Airport Approach Height Combining) on 13.76 acres and from FPP (Floodplain Primary) to M-2 PD H (Medium Industrial Precise Development Combining – Airport Approach Height Combining) on 8.56-acres; (C) Precise Development Plan No. 36 to allow the construction and operation of an industrial warehouse facility with associated quick serve restaurants on approximately 109 combined acres, over six parcels; (d) Zone Variance No. 7 to allow a maximum of 60-foot tall structures where 35-foot tall structures are allowed, and : (e) Nonsummary vacation to vacate two drainage easements could have significant effects on either of these district's facilities so long as statutory school facilities fees are collected as required by law and that no further mitigation measures regarding school facilities are necessary. Currently, this fee is set at $0.84 per square foot, an amount subject to COLA adjustment every two years.

Thank you for the opportunity to comment on the project. Should you have any questions, or if we can be of any further assistance in this matter, please contact me at 636-4599, or through e-mail at anwatson@kern.org.

Sincerely,

Andrea Watson, Specialist
School District Facility Services

Cc: Districts

Nicole Menchaca

From: Roxanne Routh
Sent: Tuesday, March 25, 2025 11:20 AM
To: Nicole Menchaca
Subject: GPA No 5; ZCC No 46; PD No 36; ZV No 7, Map 81-35
Attachments: GPA No 5; ZCC No 46; PD No 36; Zv No 7, Map 81-35_2025.pdf

Please see attached!

Respectfully,
Roxanne J. Routh
Assistant Fire Marshal
Kern County Fire Department
Mobile: 661-330-0155
rrouth@kerncountyfire.org

Office of the Fire Marshal
Kern County Fire Department
Fire Prevention Unit

2820 M St. • Bakersfield, CA 93301 • www.kerncountyfire.org
Telephone 661-391-3310 • FAX 661-636-0466/67 • TTY Relay 800-735-2929

March 25, 2025

Kern County Planning and Natural Resources Department
2800 M St., Bakersfield, CA 93301
Attn: **Nicole Menchaca, Supervising Planner**

Re: Kern County Fire Department Comments Regarding Planning Department Project

To Whom It May Concern:

The Kern County Fire Department (KCFD), as the local fire authority, has received a request for comments regarding GPA No 5; ZCC No 46; PD No 36; ZV No 7; Map 81-35ZCC 11, PD 8 Map 231-16. Upon initial review, it has been determined that all new construction will require fire water flowing a minimum 1,500 GPM for 2 hours with 20 PSI residual. All fire access roads to each parcel must meet specifications set forth in Section 503.2 of the California Fire Code and the applicable Appendix and Ordinance sections. Any structures that exceed 10,000 square feet will require fire sprinklers and a fire alarm to be installed. Any aboveground flammable liquid tanks in excess of 125 gallons will require permitting through Kern County Fire Department.

A more detailed review and project comments will be conducted when the building permit is obtained, and plans are submitted to KCFD.

Please feel free to call our Fire Prevention Office at (661) 391-3310 with any questions.

Respectfully,
Roxanne Routh
Assistant Fire Marshal
Kern County Fire Department

Nicole Menchaca

From: Curtis Alcantar <calcantar@TEJONINDIANTRIBE-NSN.GOV>
Sent: Friday, March 21, 2025 12:15 PM
To: Nicole Menchaca
Cc: Candice Garza
Subject: RE: NOTICE OF PREPARATION (NOP) OF A DRAFT ENVIRONMENTAL IMPACT REPORT (EIR) FOR THE AIRPORT COMMERCE CENTER INDUSTRIAL PROJECT BY ACC BAKERSFIELD JV, LLC
Attachments: Airport Dr Warehouse Response.pdf

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Hello Ms. Menchaca,

Thank you for your invitation to consult on the proposed project in Bakersfield, CA. Please see attached to view Tejon's formal comments.

Best,

Curtis Alcantar, B.A.
Cultural & Natural Resources Manager
M: 661.699.5138 | P: 661.834.8566 | www.tejonindiantribe.com



TEJON
INDIAN TRIBE

21 March 2025

Nicole Menchaca
Kern County Planning and Natural Resources Department
County of Kern Public Services
2700 "M" Street, Suite 100
Bakersfield, CA 93301-2370
Sent via email to: huiskenn@kerncounty.com

RE: NOTICE OF PREPARATION (NOP) OF A DRAFT ENVIRONMENTAL IMPACT REPORT (EIR) FOR THE AIRPORT COMMERCE CENTER INDUSTRIAL PROJECT BY ACC BAKERSFIELD JV, LLC

Dear Ms. Menchaca,

My name is Curtis Alcantar, and I was recently hired by the Tejon Indian Tribe for the purpose of establishing their Tribal Historic Preservation Office and managing their Cultural Resource Management department. The Tribe's Chairperson, Octavio Escobedo III, has delegated to me the authority to represent the Tribe in any consultation concerning cultural resources.

Thank you for your correspondence on March 13, 2025, inviting the Tribe to comment/consult on the proposed construction and operation of an industrial warehouse facility located in Bakersfield, CA. The Tejon Indian Tribe has reviewed the project and has the following formal comments:

The Tribe is not presently aware of any undocumented/extant Tribal Cultural Resources being located within the vicinity of the Undertaking's Area of Potential Effects (APE) that might be considered potentially eligible for listing on the National Register of Historical Places. Further, the Undertaking is sited in an area that our Tribal Records indicate as having a "low sensitivity" for Tribal Cultural Resources (based on a three-point scale of low/moderate/high).

Therefore, the Tribe has no concerns with the Undertaking moving forward as proposed and shall not be requesting any specific cultural resource mitigation measures, beyond the following request, that: "The Tejon Indian Tribe shall be immediately notified about any Tribal Cultural Resources being inadvertently identified/impacted during project implementation by sending an email summarizing the circumstances of the inadvertent discovery/impacts."

Should you have any questions or concerns, please feel free to contact me at the e-mail listed below. We look forward to continuing consultations for this and future potential projects.

Sincerely,

Curtis Alcantar, B.A.
Tejon Indian Tribe
calcantar@tejonindiantribe-nsn.gov

STATE OF CALIFORNIA — Gavin Newsom, Governor

NATIVE AMERICAN HERITAGE COMMISSION

March 13, 2025

Nicole Menchaca
Kern County Planning and Natural Resources Department
2700 "M" Street
Suite 100
Bakersfield CA 93301

RECEIVED
MAR 21 2025
Kern County Planning & Natural Resources Dept.

Re: 2025030498 Airport Commerce Center Industrial Project by ACC Bakersfield, LLC Project, Kern County

Dear Ms. Menchaca:

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.

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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: Melina.Carlos@NAHC.ca.gov.

Sincerely,

Melina Carlos

Melina Carlos
Cultural Resources Analyst

cc: State Clearinghouse

TEJON
INDIAN TRIBE

21 March 2025

Nicole Menchaca
Kern County Planning and Natural Resources Department
County of Kern Public Services
2700 "M" Street, Suite 100
Bakersfield, CA 93301-2370
Sent via email to: huiskern@kerncounty.com

RE: NOTICE OF PREPARATION (NOP) OF A DRAFT ENVIRONMENTAL IMPACT REPORT (EIR) FOR THE AIRPORT COMMERCE CENTER INDUSTRIAL PROJECT BY ACC BAKERSFIELD JV, LLC

Dear Ms. Menchaca,

My name is Curtis Alcantar, and I was recently hired by the Tejon Indian Tribe for the purpose of establishing their Tribal Historic Preservation Office and managing their Cultural Resource Management department. The Tribe's Chairperson, Octavio Escobedo III, has delegated to me the authority to represent the Tribe in any consultation concerning cultural resources.

Thank you for your correspondence on March 13, 2025, inviting the Tribe to comment/consult on the proposed construction and operation of an industrial warehouse facility located in Bakersfield, CA. The Tejon Indian Tribe has reviewed the project and has the following formal comments:

The Tribe is not presently aware of any undocumented/extant Tribal Cultural Resources being located within the vicinity of the Undertaking's Area of Potential Effects (APE) that might be considered potentially eligible for listing on the National Register of Historical Places. Further, the Undertaking is sited in an area that our Tribal Records indicate as having a "low sensitivity" for Tribal Cultural Resources (based on a three-point scale of low/moderate/high).

Therefore, the Tribe has no concerns with the Undertaking moving forward as proposed and shall not be requesting any specific cultural resource mitigation measures, beyond the following request, that: "The Tejon Indian Tribe shall be immediately notified about any Tribal Cultural Resources being inadvertently identified/impacted during project implementation by sending an email summarizing the circumstances of the inadvertent discovery/impacts."

Should you have any questions or concerns, please feel free to contact me at the e-mail listed below. We look forward to continuing consultations for this and future potential projects.

P.O. Box 640, Arvin, CA 93203 4941 David Rd, Bakersfield, CA 93307 Office: (661) 834-8566

Sincerely,

Curtis Alcantar, B.A.
Tejon Indian Tribe
calcantar@tejonindiantribe-nsn.gov

Office Memorandum

October 7, 2025

NOP of EIR for the Airport Commerce Center Industrial Project

Development Review Division GA

This Division has reviewed the subject project and recommends the following:

1. Record an irrevocable offer of dedication to the County of Kern of all subject frontage along Merle Haggard Drive, 55-feet in width, and additional right-of-way for right turn channelization, per the Kern County Land Division Ordinance, and Development Standards.

2. Record an irrevocable offer of dedication to the County of Kern of all subject frontage along Airport Drive, 55-feet in width, and additional right-of-way for right turn channelization, per the Kern County Land Division Ordinance, and Development Standards.

3. Record an irrevocable offer of dedication to the County of Kern of all subject frontage along Petrol Road, 45-feet in width, including the off-site portion of Petrol Road from the westerly project boundary line to easterly right-of-way of Landings Way for orderly development and additional right-of-way for right turn channelization, per the Kern County Land Division Ordinance, and Development Standards.

4. Record an irrevocable offer of dedication to the County of Kern of all subject frontage along Landings Way, 45-feet in width, including the off-site portion of Landings Way from the northerly project boundary line to southerly right-of-way of Petrol Road for orderly development and additional right-of-way for right turn channelization, per the Kern County Land Division Ordinance, and Development Standards.

5. Under street improvement plans approved by the Kern County Public Works Department, construct Merle Haggard Drive project frontage to Type "A" Subdivision Standard, half width Arterial Street, and right turn lane (Plate R-40), per the Kern County Development Standards and the Land Division Ordinance. These improvements shall be, but not limited to, curb, gutter, sidewalk, wheelchair ramps, asphalt concrete, right turn channelization, and the necessary tie-ins.

6. Under street improvement plans approved by the Kern County Public Works Department, construct Airport Drive project frontage to Type "A" Subdivision Standard, half width Arterial Street, and right turn lane (Plate R-40), per the Kern County Development Standards and the Land Division Ordinance. These improvements shall be, but not limited to, curb, gutter, sidewalk, wheelchair ramps, asphalt concrete, right turn channelization, and the necessary tie-ins.

7. Under street improvement plans approved by the Kern County Public Works Department, construct Petrol Road project frontage to Type "A" Subdivision Standard, half width Collector Street, and right turn lane (Plate R-40), per the Kern County Development Standards and the Land Division Ordinance. These improvements shall be, but not limited to, curb, gutter, sidewalk, wheelchair ramps, asphalt concrete, right turn channelization, and the necessary tie-ins.

8. Under street improvement plans approved by the Kern County Public Works Department, construct Petrol Road from the westerly project boundary line to easterly right-of-way of Landings Way to Type "A" Subdivision Standard, half width Collector Street, for orderly development, per the Kern County Development Standards and the Land Division Ordinance. These improvements shall be, but not limited to, curb, gutter, sidewalk, wheelchair ramps, asphalt concrete, right turn channelization, and the necessary tie-ins

9. Under street improvement plans approved by the Kern County Public Works Department, construct Landings Way project frontage to Type "A" Subdivision Standard, half width Collector Street, and right turn lane (Plate R-40), per the Kern County Development Standards and the Land Division Ordinance. These improvements shall be, but not limited to, curb, gutter, sidewalk, wheelchair ramps, asphalt concrete, right turn channelization, and the necessary tie-ins.

10. Under street improvement plans approved by the Kern County Public Works Department, construct Landings Way from the northerly project boundary line to southerly right-of-way of Petrol Road to Type "A" Subdivision Standard, half width Collector Street, for orderly development, per the Kern County Development Standards and the Land Division Ordinance. These improvements shall be, but not limited to, curb, gutter, sidewalk, wheelchair ramps, asphalt concrete, right turn channelization, and the necessary tie-ins

11. Under street improvement plans approved by the Kern County Public Works Department, modify existing traffic signal at the intersection of Merle Haggard Drive and Landings Way, per the Kern County Development Standards and the Land Division Ordinance.

12. Provide a 20-foot by 20-foot right of way corner cutoff at all intersections.

13. Please include a striping plan and streetlight plan with the street improvement plans.

14. All employee drive approaches shall conform to Plate R-55, per the Kern County Development Standards and the Land Division Ordinance.

15. All truck drive approaches shall conform to Plate R-58, widths to be determined in consultation with Kern County Public Works Department and per the Kern County Development Standards and the Land Division Ordinance.

16. All easements shall be kept open, clear, and free from buildings and structures of any kind pursuant to Chapters 18.50 and 18.55 of the Kern County Land Division Ordinance. All obstructions, including utility poles and lines, trees, pole signs, fences, or similar obstructions, shall be removed from the ultimate road rights-of-way. Compliance with this requirement is the responsibility of the applicant and may result in significant financial expenditures.

Thank you for the opportunity to comment on this project. If you have any questions or comments, please contact Rodd Parke of this Division at (661) 862-8848.

Appendix B

Air Quality, Greenhouse Gases, and Energy Analysis Report

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FCS
An ADEC Innovation

Airport Commerce Center Industrial Project

Final Air Quality, Greenhouse Gas Emissions, and Energy Analysis Report

Unincorporated Kern County, California

PREPARED FOR:

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South San Francisco, CA 94080

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LEAD AGENCY:

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Tsui Li, Senior Air Quality Scientist

February 4, 2026

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Appendix A: Air Quality, Greenhouse Gas Emissions, and Energy Supporting Information

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ACRONYMS AND ABBREVIATIONS

°C	degrees Celsius
°F	degrees Fahrenheit
µg/m^3	micrograms per cubic meter
AAM	annual arithmetic mean
AAQA	Ambient Air Quality Analysis
AB	Assembly Bill
ACC	Advanced Clean Cars Program
ACT	Advanced Clean Truck
AERMOD	American Meteorological Society/EPA Regulatory Model
APCD	Air Pollution Control District
APN	Assessor's Parcel Number
AQAP	Air Quality Attainment Plan
AQI	Air Quality Index
AQP	Air Quality Plan
AQMD	Air Quality Management District
ARB	California Air Resources Board
ATCM	Airborne Toxic Control Measures
BAU	Business-as-Usual
Bay Area Air District	Bay Area Air Quality Management District
BMP	Best Management Practice
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CalEEMod	California Emissions Estimator Model
Cal/EPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code
CalRecycle	California Department of Resources Recycling and Recovery
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARE	Community Air Risk Evaluation
CBC	California Building Standards Code
CCAA	California Clean Air Act

CEC	California Energy Commission
CEQA	California Environmental Quality Act
CG	General Commercial
CH_4	methane
CI	compression ignition
CNG	compressed natural gas
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
COG	Council of Governments
CPF	cancer potency factor
CPUC	California Public Utility Commission
DMA	Developer Mitigation Agreement
DOE	Department of Energy
DPM	diesel particulate matter
EDFZ	Electricity Demand Forecast Zone
EIA	United States Energy Information Administration
EIR	Environmental Impact Report
EISA	Energy Independence and Security Act
EMFAC	Emission Factors mobile source emissions model
EPA	United States Environmental Protection Agency
eTRIP	Employer Trip Reduction Implementation Plan
EV	electric vehicle
EVCS	electric vehicle charging station
FCS	FirstCarbon Solutions
FTIP	Federal Transportation Improvement Program
GAMAQI	Guidance for Assessing and Mitigating Air Quality Impacts
GC	General Commercial
g/L	grams per liter
g/s	grams per second
gal/bhp-hr	gallons per brake horsepower hour
GHG	greenhouse gas
GWh	gigawatt-hours
GWP	global warming potential
HFC	hydrofluorocarbons

HARP2	Hotspots Analysis and Reporting Program Version 2
HHDT	heavy heavy-duty truck
HIA	acute hazard index
HIC	chronic hazard index
hp	horsepower
HRA	Health Risk Assessment
HVAC	heating, ventilation, and air conditioning
I&M	Inspection and Maintenance
IEPR	Integrated Energy Policy Report
IOU	investor-owned utility
IPCC	United Nations Intergovernmental Panel on Climate Change
ISR	Indirect Source Review
kBTU	kilo-British Thermal Unit
kWh	kilowatt hour
LCFS	Low Carbon Fuel Standard
LCI	California Governor's Office Land Use and Climate Innovation
LDA	light-duty auto
LDT1	light-duty truck type 1
LDT2	light-duty truck type 2
LED	light-emitting diode
LOS	Level of Service
LSE	load-serving entity
LSI	large spark-ignition
MDV	medium-duty vehicle
MEIR	Maximally Exposed Individual Resident
MEIW	Maximally Exposed Individual Worker
MHDT	medium heavy-duty truck
MIR	Maximally Impacted Sensitive Receptor
MM	Mitigation Measure
MMT	million metric tons
mpg	miles per gallon
MPO	Metropolitan Planning Organization
MT	metric tons
MWh	megawatt-hour
NAP	Nonattainment Area Plan

NF_3	nitrogen trifluoride
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NASA	National Aeronautics and Space Administration
NCEI	National Centers for Environmental Information
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_2	nitrogen dioxide
NO_X	nitrogen oxides
NOAA	National Oceanic and Atmospheric Administration
O_3	ozone
OEHHA	California Office of Environmental Health Hazard Assessment
Pb	lead
PC	Permit Condition
PFC	perfluorocarbon
PG&E	Pacific Gas and Electric Company
PHEV	plug-in hybrid-electric vehicle
PM	particulate matter
PM_{10}	particulate matter less than 10 microns in diameter
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
POU	publicly owned utility
ppm	parts per million
PRC	Public Resources Code
PSPS	Public Safety Power Shutoff
PV	photovoltaic
RACM	regulated asbestos-containing materials
REL	Reference Exposure Level
ROG	reactive organic gases
RPS	Renewables Portfolio Standard
RTP	Regional Transportation Plan
SB	Senate Bill
South Coast AQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy
SoCAB	South Coast Air Basin
SF_6	sulfur hexafluoride
SI	Service Industrial

SIL	significant impact level
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SIL	significant impact level
SIP	State Implementation Plan
SLAMS	State and Local Air Monitoring Stations
SO_2	sulfur dioxide
SORE	Small Off-Road Engines
SO_X	sulfur oxides
SR	State Route
TAC	toxic air contaminant
TDM	Transportation Demand Management
TPY	tons per year
TRU	Transport Refrigeration Unit
VERA	Voluntary Emission Reduction Agreement
VMT	Vehicle Miles Traveled
VOC	volatile organic compound
ZEV	Zero-Emission Vehicle

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1 - INTRODUCTION

1.1 - Purpose and Methods of Analysis

This Air Quality, Greenhouse Gas Emissions, and Energy Analysis Report was prepared by FirstCarbon Solutions (FCS) to evaluate the estimated criteria air pollutant, ozone precursor, toxic air contaminant (TAC), and/or greenhouse gas (GHG) emissions generated from construction and/or operation of the proposed Airport Commerce Center Industrial Project (proposed project). Analysis presented within this section is based on both qualitative and quantitative approaches for assessing potential air quality impacts associated with construction, operation, and maintenance of the proposed project. This report was prepared in accordance with the Kern County (County) Planning Department's Guidelines for Preparing an Air Quality Assessment for Use in Environmental Impact Reports and the San Joaquin Valley Air Pollution Control District (SJVAPCD) 2015 Guidance for Assessing and Mitigation Air Quality Impacts.

1.2 - Project Summary

The proposed project is a proposal by ACC Bakersfield JV, LLC (project proponent) for the construction and operation of an industrial warehouse facility with associated quick serve restaurants. The proposed project would include the construction of four single-story warehouses totaling approximately 1,505,440 square feet, including two single-story quick serve restaurants totaling 9,410 square feet and related site improvements. There would be 2,001 parking spaces and 444 truck trailer spaces.

1.2.1 - Site Location

The proposed project would be located on six parcels totaling approximately 110 acres (Assessor's Parcel Numbers [APNs], 483-040-32, 483-040-33, 483-040-42, 483-040-43, 483-040-45, and 483-040-46) of privately owned land at the southern end of the San Joaquin Valley in unincorporated Kern County, California (Exhibit 1). The project site is bound by Petrol Road (north), Airport Drive (east), Merle Haggard Drive (south), and Landings Way (west) as shown in Exhibit 2. A detailed site plan is shown in Exhibit 3.

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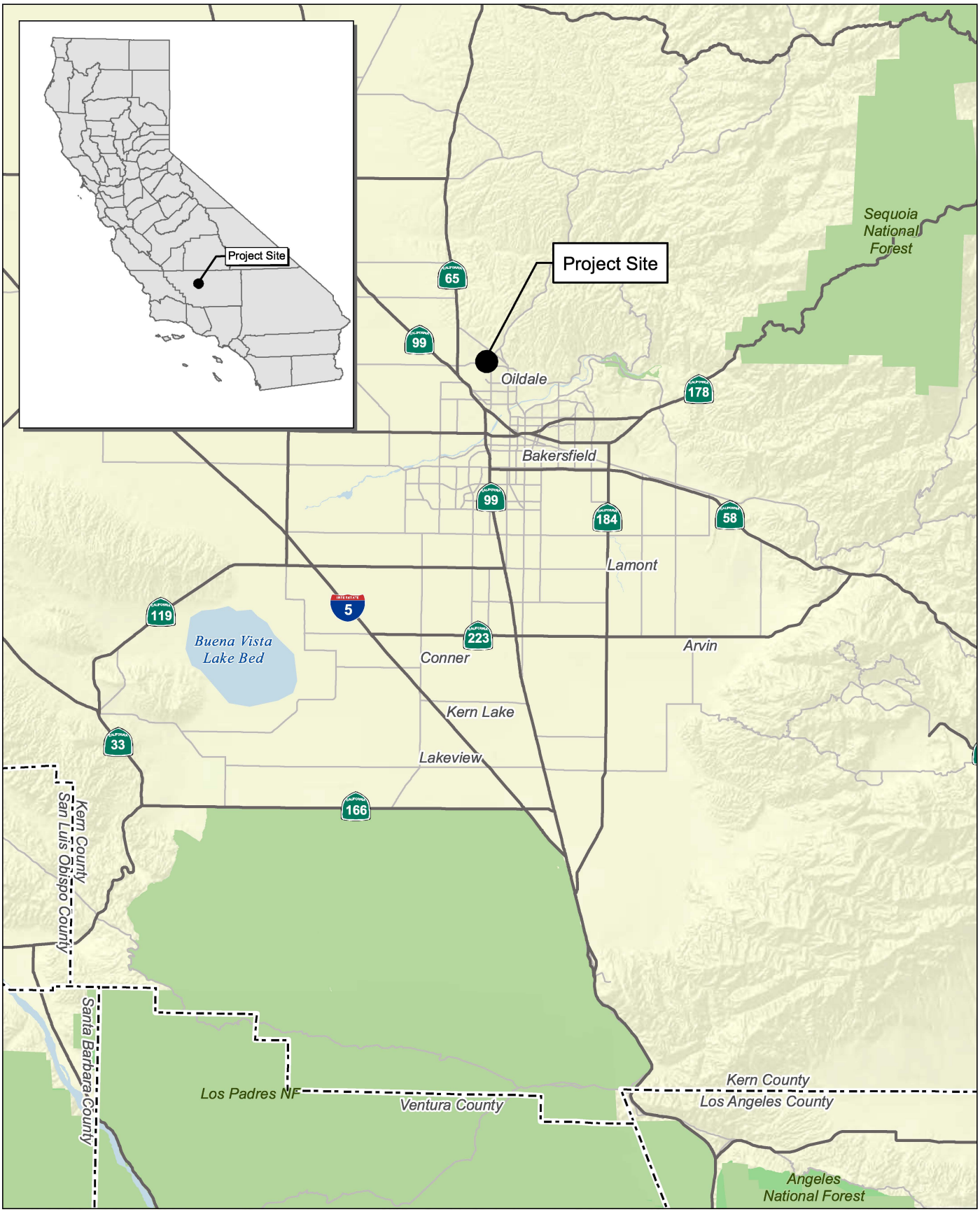

Source: Census 2000 Data, The California Spatial Information Library (CaSIL).

FIRSTCARBON SOLUTIONS™

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Exhibit 1
Regional Location Map

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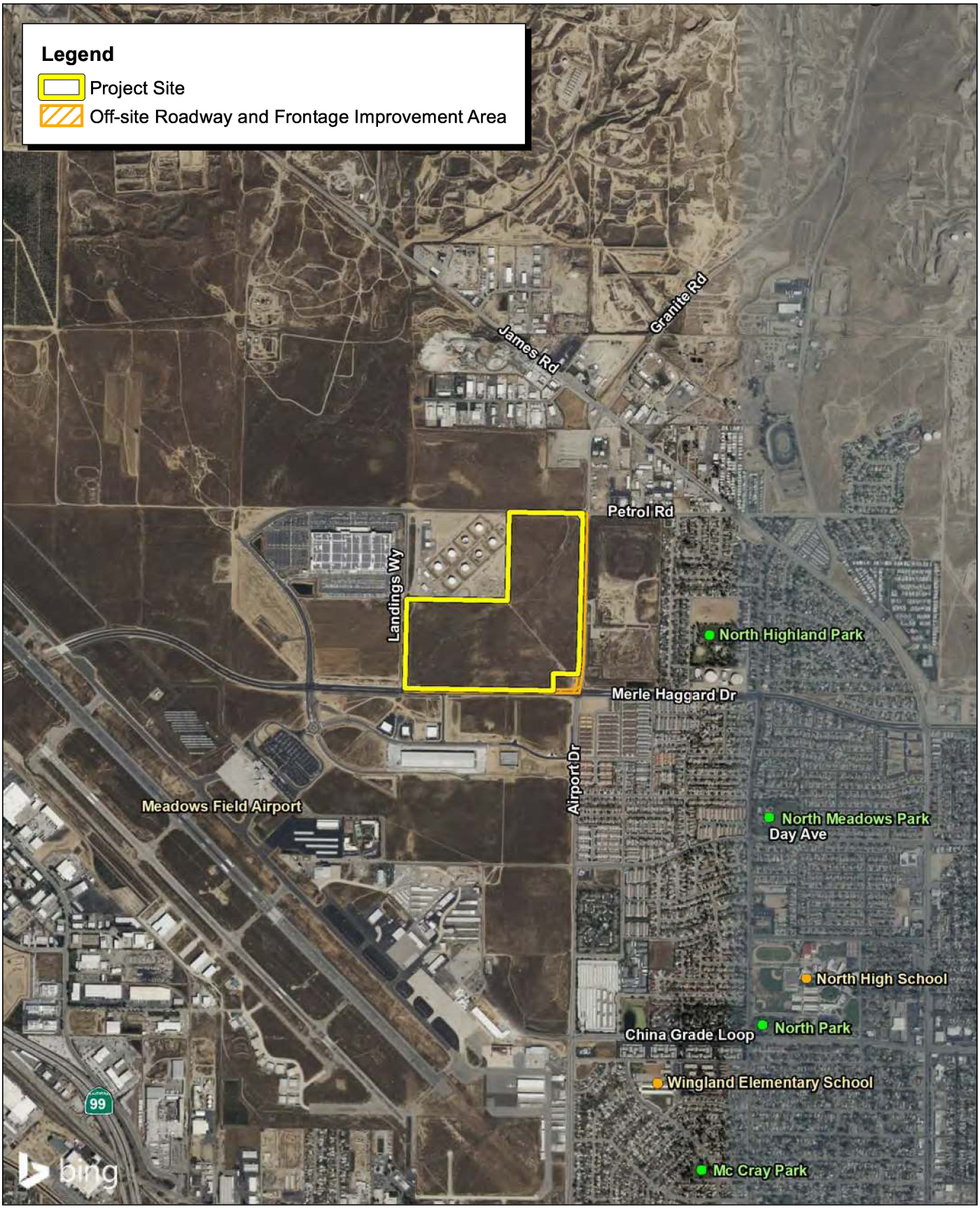

Source: Bing Aerial Imagery. New Gen Engineering Group, Inc. dba McIntosh & Associates, 02/12/2025.

FIRSTCARBON SOLUTIONS™

1,900 950 0 1,900 Feet

Exhibit 2
Local Vicinity Map

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BAYSPRING REAL ESTATE PARTNERS
AIRPORT COMMERCE CENTER PROJECT
AIR QUALITY AND GREENHOUSE GAS EMISSIONS AND ENERGY IMPACTS ANALYSIS

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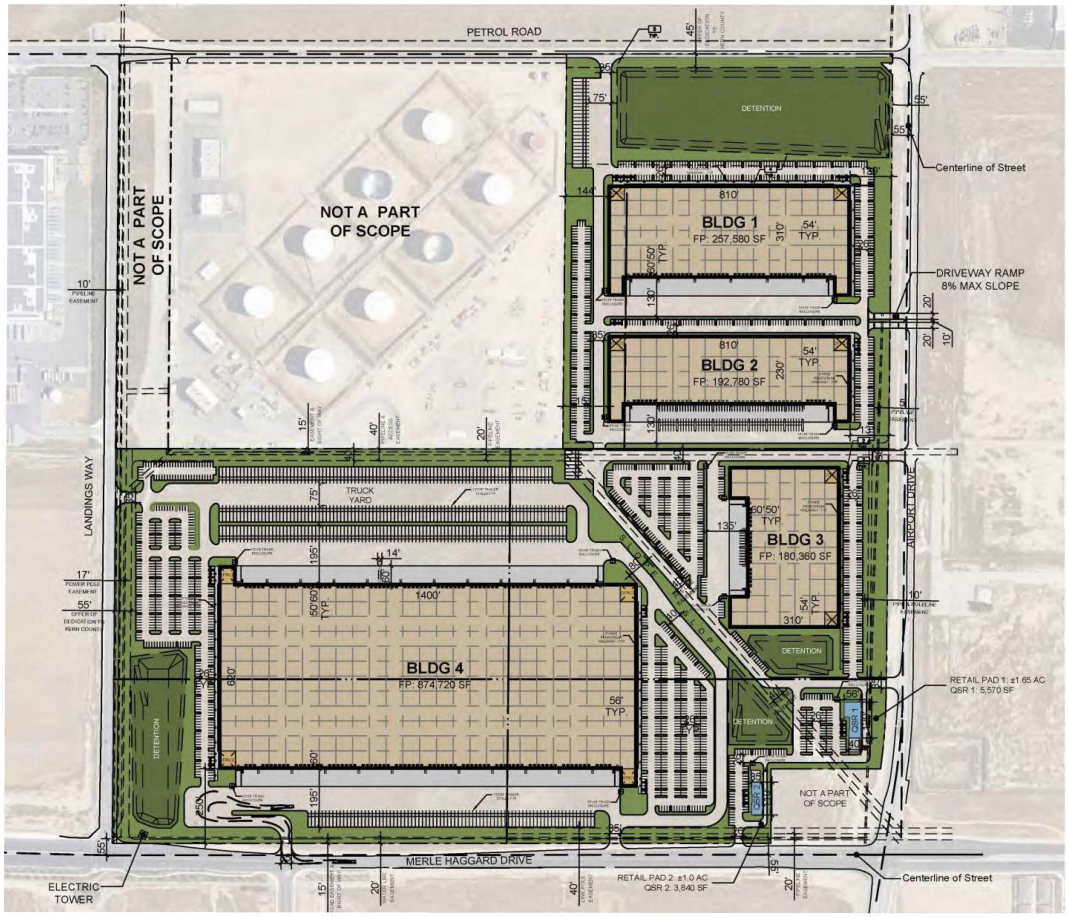

Source: Ware Malcomb, 02/06/2025.

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Exhibit 3
Site Plan

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BAYSPRING REAL ESTATE PARTNERS
AIRPORT COMMERCE CENTER PROJECT
AIR QUALITY AND GREENHOUSE GAS EMISSIONS AND ENERGY IMPACTS ANALYSIS

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The project site is located in the Oildale area of unincorporated Bakersfield in Kern County. The project site is located within the Metropolitan Bakersfield General Plan (unincorporated Planning Area), and is situated approximately 1.54 miles east of State Route (SR) 65 and approximately 2.19 miles east of SR-99. Regional access to the project site is available from SR-99 via the Seventh Standard Road exit. Local access to the project site is available from Airport Drive and Merle Haggard Drive.

The project vicinity is characterized by industrial, commercial, and residential uses including logistics facilities, industrial manufacturing and storage, housing tracts and vacant land. There are no existing schools within 0.5 mile of the project site. A proposed school is located in the North Highland Park area approximately 2,000 feet to the east of the project site.

1.2.2 - Project Description

The proposed project consists of four single-story warehouses totaling approximately 1,505,440 square feet, including two single-story quick serve restaurants totaling 9,410 square feet and related site improvements. The warehouse buildings would be primarily tilt-up panel construction of architecturally enhanced concrete panels with a maximum height of 60 feet above ground level. Additional design elements, such as refinement and articulation of the building corners, would be included in the construction. The quick serve restaurants would be wood frame or metal construction with a maximum height of 20 feet above ground level. The building designs and selected colors would comply with all required County ordinances and development standards and meet the standards for all California Green Building Standards Code (CALGreen) (Title 24 requirements).

The warehouses would provide dock-high doors which would be utilized by delivery trucks. Approximately 215 dock-high doors and 10 grade-level doors would be included. The proposed project would include approximately 2,001 automobile parking stalls, 401 truck trailer parking stalls, 46 accessible parking stalls, and 102 electric vehicle charging stations (EVCS).

The proposed project would include roadway and frontage improvements along Airport Drive, Merle Haggard Drive, Landings Way, and Petrol Road in addition to entryways into the site. Such improvements would be necessary to meet applicable Kern County Public Works Department development standards. The total roadway frontage improvement area would be 11.36 acres.

The existing roads would be improved with new pavement, curb and gutter, and sidewalk. Additionally, signing and markings would be constructed for the new pavement delineations. The proposed facility would operate 24 hours a day, 365 days a year and typically consist of multiple shifts rotating throughout the day and night. The facility would employ approximately 532 employees over the course of the shifts. Once operational, the proposed project would utilize standard on-site service equipment, such as cargo handling equipment, forklifts, pallet jacks, or yard jostlers, which would utilize zero-emission technology pursuant to SJVAPCD recommendations. Because the proposed project would utilize all-electric equipment, all buildings would be designed to provide infrastructure,

such as power outlets and setups for charging stations, to support the use of all-electric on-site service equipment.

The proposed project is anticipated to include six backup generators (one each in Building 1, Building 2, and Building 3 and three in Building 4). The proposed project will be constructed and operated as all-electric and will not be served by natural gas.

The proposed project would generate approximately 824 daily truck trips. Ingress to the proposed project would be taken from three driveway entrances off Airport Drive, three off Merle Haggard Drive, one off Landings Way, and one off Petrol Road.

1.2.3 - Landscaping

The proposed project would include approximately 878,123 square feet of landscaping and low-flow irrigation, which would consist primarily of drought-tolerant plants. Islands with canopy trees would be provided to reduce heat. Landscaping would also be utilized to provide visual screening where needed. Landscaping would exceed the 5 percent landscaping requirement of Section 19.86.060 of the Kern County Zoning Ordinance. There are no existing trees on-site, and therefore no trees would be required to be removed.

1.2.4 - Construction Activities

The construction schedule was assumed to last approximately 27–29 months with construction occurring in overlapping phases. The precise duration would vary depending on whether the construction dates are at the start or end of the schedule. It is anticipated that construction would begin in December 2025 and conclude in May 2028; it was assumed that project operations would begin immediately thereafter. Should the construction schedule move to later years, construction emissions would be expected to decrease because of mandatory compliance with improvements in technology and more stringent regulatory requirements that would affect future construction equipment and fuels. Should the construction schedule take longer to complete, the average daily emissions would be lower than what is calculated for purposes of this analysis.

Construction would primarily occur during daylight hours, Monday through Friday, between 7:00 a.m. and 8:00 p.m., or up to 7 days per week as required to meet the construction schedule. Additional hours may be necessary to facilitate the schedule. Any construction work performed outside of the normal work schedule would be coordinated with the appropriate agencies and would conform to the Metropolitan Bakersfield General Plan and the Kern County Noise Ordinance (Chapter 8.36).

1.2.5 - Passenger and Truck Vehicle Routes

It is estimated that the proposed project would generate 5,600 daily trips from passenger vehicles (including those associated with the warehousing and the quick serve restaurant with a drive-through), and 824 daily trips from trucks servicing the warehouses.

According to the traffic study conducted for the proposed project, passenger vehicles traveling to the proposed project site would utilize several local surface streets and arterials, including Merle Haggard Drive between Landings Way and Airport Drive, 7th Standard Road between Coffee Road and Quinn Road/SR-99, and Airport Drive between Day Avenue/Boughton Drive and Merle Haggard Drive. The proposed project would improve the capacity along Merle Haggard Drive between Landing Way and Airport Drive through the construction of its frontage.

SR-65 serves local freight customers between Bakersfield (and points beyond) and Porterville. Any through traffic to and/or from points north of Porterville tend to use the parallel route of SR-99.[1] Because delivery trucks would not originate locally and would travel to/from the site via designated truck routes, these vehicles are assumed to be distributed to the study area as follows:

- 50 percent originate and destinate within the San Joaquin Valley Air Basin (SJVAB) and 50 percent originate from the Ports of Los Angeles and/or Long Beach (which is within the South Coast Air Basin [SoCAB]).
- Within SJVAB:
  - 35 percent would travel northbound along SR-99 to Delano, Tulare, and/or Fresno (total trip length of 105 miles) and 15 percent would travel northbound on SR-65 to Porterville (total trip length of 45 miles).
  - 50 percent would travel southbound on SR-99 to Interstate 5 (I-5) (total trip length of 46 miles to the SoCAB border)
  - Composite truck trip length within the SJVAB is assumed to be 66.5 miles
- Within SoCAB:
  - 100 percent would travel southbound from the SJVAB border to the Ports of Los Angeles and/or Long Beach (total trip length of 97 miles).

1.2.6 - Cold Storage

According to applicant-provided information, the proposed facility is assumed to be used for cold storage (i.e., refrigerated uses) and would include trucks with Transport Refrigeration Units (TRUs). TRUs are refrigeration systems powered by diesel internal combustion engines designed to refrigerate or heat perishable products that are transported in various containers, including truck vans, and semi-truck trailers. Building 4 is anticipated to be used for 50 percent cold storage and 50 percent dry storage. The truck trips associated with the cold storage uses at Building 4 include 265 trucks per day which would be equipped with TRUs. Therefore, the emissions analysis and Health Risk Assessment (HRA) accounted for TRU emissions regionally and locally. Recommendations to reduce TRU emissions include prohibiting on-site TRUs from idling for more than 30 minutes. In addition, prior to the issuance of occupancy permits, the Planning Department would require that the tenant lease agreements include contractual language that requires all TRUs entering the project site be plug-in capable. Electrical hookups would be provided as part of the tenant improvements for any

[1] Kern Council of Governments (Kern COG). 2021. Kern Area Regional Goods-Movement Operations: Sustainability Study Phase 1: Integrated Circulation Study.

tenant that requires cold storage. The electrical hookups would be provided at loading bays for truckers to plug in any onboard auxiliary equipment and power refrigeration units while their truck is stopped.

1.3 - Permit Conditions Applied to the Proposed Project

Permit Conditions (PCs) are measures or actions which would be required to be implemented by the SJVAPCD or by Kern County. Therefore, the PCs (along with project-specific design features as described in the Project Description) are presumed to be implemented and are accounted for in the modeling which estimates baseline emissions.

1.3.1 - Air Quality

PC AIR-1 Construction and operation of the project shall be conducted in compliance with applicable rules and regulations set forth by the San Joaquin Valley Air Pollution Control District (SJVAPCD). Dust control measures outlined below shall be implemented where they are applicable and feasible. The list shall not be considered all-inclusive, and any other measures to reduce fugitive dust emissions not listed shall be encouraged.

a. Land Preparation, Excavation and/or Demolition. The following dust control measures shall be implemented:
    i. All soil excavated or graded shall be sufficiently watered to prevent excessive dust. Watering shall occur as needed with complete coverage of disturbed soil areas. Watering shall take place a minimum of twice daily on unpaved/untreated roads and on disturbed soil areas with active operations.
    ii. All clearing, grading, earthmoving, and excavation activities shall cease during periods of winds greater than 20 miles per hour (averaged over one hour), if disturbed material is easily windblown, or when dust plumes of 20 percent or greater opacity impact public roads, occupied structures, or neighboring property.
    iii. All fine material transported off-site shall be either sufficiently watered or securely covered to prevent excessive dust.
    iv. Areas disturbed by clearing, earthmoving, or excavation activities shall be minimized at all times.
    v. Stockpiles of dirt or other fine loose material shall be stabilized by watering or other appropriate method to prevent windblown fugitive dust.
    vi. Where acceptable to the Kern County Fire Department, weed control shall be accomplished by mowing instead of disking, thereby leaving the ground undisturbed and with a mulch covering.
b. Site Construction. After clearing, grading, earthmoving, and/or excavating is completed within any portion of the project sites, the following dust control practices shall be implemented:

i. Once initial leveling has ceased, all temporality open and inactive soil areas within the construction site shall be (1) seeded and watered until plant growth is evident, (2) treated with a dust palliative, or (3) watered twice daily until soil has sufficiently crusted to prevent fugitive dust emissions.
ii. Dependent on specific site conditions (season and wind conditions), revegetation shall occur in open areas.
iii. All active disturbed soil areas shall be sufficiently watered at least twice daily or have dust palliatives applied to prevent excessive dust.

c. Vehicular Activities. During all phases of construction, the following vehicular control measures shall be implemented:
i. On-site vehicle speed shall be limited to 15 miles per hour.
ii. All areas with vehicle traffic shall be paved, treated with dust palliatives or watered a minimum of twice daily.
iii. Streets adjacent to the project sites shall be kept clean, and project-related accumulated silt shall be removed.
iv. Access to the project sites shall be by means of an apron into the project sites from adjoining surfaced roadways. The aprons shall be surfaced or treated with dust palliatives. If operating on soils that cling to the wheels of vehicles, a grizzly, wheel washer, or other such device shall be used on the road exiting the project sites, immediately prior to the pavement, in order to remove most of the soil material from vehicle tires.

PC AIR-2 Prior to issuance of any grading permit, the project proponent shall submit a Site-Specific Dust Control Plan for review and approval by the Kern County Planning and Natural Resources Department. The Site-specific Dust Control Plan shall serve to minimize fugitive dust emissions during project construction. The Site-specific Dust Control Plan shall take into consideration grading and construction schedule, seasonal winds, site-specific wind patterns and soil conditions to ensure adequate measures are implemented to manage fugitive dust. The Site-specific Dust Control Plan shall:

a. Identify a comprehensive grading schedule for the entire project site. When feasible, grading activities shall be minimized to those areas necessary for project access.
b. The Site-specific Dust Control Plan shall identify, in addition to those measures required by the air district, all measures being undertaken during construction activities and operational activities to ensure fugitive dust being blown off-site is minimized. Measures may include, but are not limited to:
i. Use of water trucks as required for the expected level of winds in the area.
ii. Use of dust suppressant (i.e., soil binders or mulch).
iii. Pre-seeding and irrigating prior to construction to create vegetation with useful root structures.

iv. Construction of dust screening in appropriate locations around the project site (i.e., fence slats or mesh screening).
v. A copy of the approved Site-specific Dust Control Plan shall be kept at the on-site construction office and all measures included in the Site-specific Dust Control Plan shall be included on all Grading Plans issued for the project by the Kern County Public Works Department.

PC AIR-3 The project applicant and/or its contractors shall implement the following measures during construction of the project:

a. All equipment shall be maintained in accordance with the manufacturer's specifications.
b. Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for extended periods of time.
c. Construction equipment shall operate longer than 8 cumulative hours per day.
d. Electric equipment shall be used whenever possible in lieu of diesel or gasoline powered equipment.
e. All construction vehicles shall be equipped with proper emissions control equipment and kept in good and proper running order to substantially reduce NO_X emissions.
f. On-road and off-road diesel equipment shall use diesel particulate filters (or the equivalent) if permitted under manufacturer's guidelines.
g. Tier 3 engines shall be used on all equipment when available.

PC AIR-4 Compliance with AB 98 Requirements. The proposed project shall implement the following measures:

a) Orient truck loading bays on the opposite side of the logistics use development away from sensitive receptors to the extent feasible.
b) Locate truck entry, exit, and internal circulation away from sensitive receptors. Heavy-duty diesel truck drive aisles shall be prohibited from being used on sides of the building that are directly adjacent to a sensitive receptor property line.
c) Include buffering and screening to mitigate for light and noise: Buffer areas shall include a solid decorative wall, landscaped berm and wall, or landscaped berm 10 feet or more in height, drought-tolerant natural ground landscaping with proper irrigation, and solid screen buffering trees as described below .
Trees shall be used as part of a solid screen buffering treatment and planted in two rows along the length of the property line adjacent to the sensitive receptor. Trees used for this purpose shall be evergreen, drought-tolerant, to the extent feasible, composed of species with low biogenic emissions, of a minimum 36-inch box size at planting, and spaced at no greater distance than 40 feet on center. Palm trees shall not be utilized.

d) Comply with or exceed all requirements of the most current building energy efficiency standards specified in Part 6 (commencing with Section 100) of Title 24 of the California Code of Regulations and the California Green Building Standards Code (Part 11 of Title 24 of the California Code of Regulations), including, but not limited to, the following requirements related to:
   A. Photovoltaic system installation and associated battery storage.
   B. Cool roofing.
   C. Medium- and heavy-duty vehicle charging readiness.
   D. Light-duty electric vehicle charging readiness and installed charging stations.

e) Provide conduits at loading bays equal to one truck per every loading bay serving cold storage.

f) Ensure that any heating, ventilation, and air conditioning (HVAC) is high efficiency.

g) Have a separate entrance for heavy-duty trucks accessible via a truck route, arterial road, major thoroughfare, or a local road that predominantly serves commercial oriented uses.

1.4 - Recommended Measures

1.4.1 - Air Quality

The following measures are recommended to reduce criteria pollutant emissions.

AIR-1 Prior to issuance of building permits, the project applicant/developer shall demonstrate to the satisfaction of the Kern County Planning that the project applicant shall require the use of super compliant, low-VOC [volatile organic compound] paints (less than 10 grams per liter [g/L]) during the architectural coating construction phase of project construction, and during project maintenance.

AIR-2 Prior to the issuance of occupancy permits, the Kern County Planning Department will require that the tenant lease agreements include contractual language that requires all Transport Refrigeration Units (TRUs) entering the project site to be plug-in capable. Electrical hookups shall be provided as part of the tenant improvements for any tenant that requires cold storage. The electrical hookups shall be provided at loading bays for truckers to plug in any onboard auxiliary equipment and power refrigeration units while their truck is stopped.

Idling or use of auxiliary truck engine power to power climate control equipment shall be prohibited if the truck is capable of plugging in at the loading bay. If the truck cannot plug-in, idling will be limited to 3 minutes (pursuant to San Joaquin Valley Air Pollution Control District [SJVAPCD] recommendations) and idling of TRUs will be limited to 30 minutes.

To reduce idling emissions from trucks and TRUs, the project applicant/developer shall have signage placed at truck access gates, loading docks, and truck parking areas that clearly notes idling is strictly prohibited on the subject property. In coordination with Kern County, the project applicant/developer shall also place similar signs in the adjacent streets in the project area. At minimum, each sign placed outside the interior premises of the subject property shall note the idling prohibition on the adjacent streets and include telephone numbers of the building facilities manager and the California Air Resources Board to report violations. All signage shall be made of weather-proof materials. All site and architectural plans submitted to Kern County shall note the locations of these signs. Prior to issuance of occupancy permits, Kern County shall verify compliance with these requirements herein.

AIR-3 Prior to issuance of any grading or construction permits the project applicant/developer shall enter into a Developer Mitigation Agreement (DMA) with the San Joaquin Valley Air Pollution Control District (SJVAPCD). The DMA is to offset criteria emissions of the project implementation, not required to be offset under an SJVAPCD Rule, and for proposed project vehicle and all other mobile source emissions. The project applicant/developer shall pay fees to fully offset project emissions of oxides of nitrogen (NO_X), reactive organic gases (ROG), particulate matter less than 10 microns in diameter (PM_{10}), and particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) (including as applicable mitigating for reactive organic gases by additive reductions of PM_{10}) (collectively, "designated criteria emissions") to avoid any net increase in these pollutants. The air quality offset fee shall further be paid prior to the approval of any construction or grading approval and shall be used to reduce designated criteria emissions to fully offset project emissions that are not otherwise required to be fully offset by SJVAPCD permit rules and regulations.

1.4.2 - Greenhouse Gas Emissions

PC AIR-3 and PC AIR-4 will also serve to reduce GHGs. In addition, the following measures are recommended to further reduce GHG emissions.

GHG-1 Prior to issuance of occupancy permits, the project applicant/developer shall demonstrate to the satisfaction of the Kern County Planning and Natural Resources Department that the proposed parking areas for passenger automobiles are designed and will be built to accommodate electric vehicle (EV) charging stations. At minimum, the parking shall be designed to accommodate a number of EV charging stations equal to the Tier 2 Nonresidential Voluntary Measures of the California Green Building Standards Code (CALGreen), Section A5.106.5.3.2.

GHG-2 100 percent Renewable Energy Development or Procurement

Prior to the issuance of grading and building permits for the project, the project applicant/developer shall provide to the Kern County Planning and Natural Resources Department for review and approval documentation demonstrating that the proposed project will implement one of the following measures:

- Install solar panels, solar hot water, or other clean energy power generation sources on the proposed project site to provide 100 percent of the proposed project's energy needs; or
- Participate in Pacific Gas and Electric Company's (PG&E's) Solar Choice program for nonresidential (i.e., 100 percent carbon-free electricity) for electricity accounts associated with the project to procure 100 percent of the proposed project's electricity needs from renewable energy.

1.4.3 - Energy

PC AIR-3 and PC AIR-4, as well as recommended measures to reduce GHGs, including GHG-1 and GHG-2, would also serve to increase energy efficiency and/or reduce fuel use.

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2 - AIR QUALITY

2.1 - Environmental Setting

The proposed project is located in the unincorporated area of Kern County in the metropolitan Bakersfield area and within the SJVAB and the boundaries of the SJVAPCD. Regional and local air quality is impacted by topography, dominant airflows, atmospheric inversions, location, and season. The following section describes these conditions as they pertain to the SJVAB.[2]

2.1.1 - San Joaquin Valley Air Basin

Topography and Meteorology

Air pollution, especially the dispersion of air pollutants, is directly related to a region's topographic features. Air quality is a function of both the rate and location of pollutant emissions and the meteorological conditions and topographic features that influence pollutant movement and dispersal. Atmospheric conditions such as wind speed, wind direction, atmospheric stability, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants, which affects ambient air quality.

The SJVAB is generally shaped like a bowl. It is open in the north and is surrounded by mountain ranges on all other sides. The Sierra Nevada mountains are along the eastern boundary (8,000 to 14,000 feet in elevation), the Coast Ranges are along the western boundary (3,000 feet in elevation), and the Tehachapi Mountains are along the southern boundary (6,000 to 8,000 feet in elevation). The SJVAB has an "inland Mediterranean" climate and is characterized by long, hot, dry summers, and short, foggy winters. Sunlight can be a catalyst in the formation of some air pollutants (such as ozone); the SJVAB averages over 260 sunny days per year. The climate is a result of the topography and the strength and location of a semi-permanent, subtropical high-pressure cell.

Winds in Kern County typically blow from the northwest. The region's topographic features restrict air movement and channel the air mass toward the southeastern end of the San Joaquin Valley. This effect moderates air temperatures in the region, with average minimum winter temperatures ranging from the low 40°F (degrees Fahrenheit) to the mid-40°F and average maximum summer temperatures ranging from the low 90°F to 100°F. Wind speeds are moderate in this region, with annual average wind speeds of approximately 6 miles per hour.

[2] San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19, 2015. Website: https://archive.valleyair.org/transportation/ceqa_guidance_documents.htm. Accessed April 16, 2025.

Regional Climate and Air Pollution Potential

The climate is important for air quality because of differences in the atmosphere's ability to trap pollutants close to the ground, creating adverse air quality or rapidly dispersing pollutants over a wide area, thus preventing high concentrations from accumulating under different climatic conditions. The SJVAB has an "inland Mediterranean" climate and is characterized by long, hot, dry summers, and short, foggy winters. Sunlight can be a catalyst in the formation of some air pollutants (such as ozone); the SJVAB averages over 260 sunny days per year.

The valley topography and climate of the SJVAB create ideal conditions for trapping and holding pollutants within the valley. The particle and gaseous emissions can recirculate within the valley and accumulate to unhealthy levels. Bakersfield's hot, desert-like climate promotes the prevalence of smog during hot winter months. It is an especially dry climate, averaging just 6 inches of rainfall a year, which prevents particle pollution from coagulating or being tamped down by rain, and, as a result, particles can remain suspended in the air for much longer than is typical.

Sources of Pollution

Bakersfield is a hub for energy production, agriculture, and distribution in California. The oil and gas industry and agriculture contribute largely to the region's pollution, including exhaust from passenger vehicles which also contribute to local pollution sources. Mobile sources including passenger vehicles and heavy truck traffic on the SR-99 and I-5 are major contributors to air pollution in the basin.

Sensitive Receptors

Sensitive receptors are land uses or people considered to be more sensitive than others to air pollutants. The reasons for greater than average sensitivity include pre-existing health problems, proximity to emissions sources, or duration of exposure to air pollutants. Residences, schools, hospitals, convalescent homes, and parks are considered to be relatively sensitive to poor air quality because children, elderly people, and the infirm are more susceptible to respiratory distress and other air quality-related health problems than the general public. Residential areas are considered sensitive to poor air quality because people usually stay home for extended periods of time, with associated greater exposure to ambient air quality. Recreational uses are also considered sensitive due to greater exposure to ambient air quality conditions because vigorous exercise associated with recreation places a high demand on the human respiratory system.

The project site is approximately 110 acres in size and is currently zoned for Service Industrial (SI), General Commercial (GC) uses. The surrounding area is also zoned for SI and GC uses. The outlying project vicinity includes single- and multi-family residences, mostly east of the project site. The nearest residence is approximately 400 feet directly southeast of the project site (but over 1,000 feet from the closest proposed industrial building). The nearest existing schools include North High School located approximately 1 mile southeast of the project site, Wingland Elementary School located approximately 1.15 miles southeast of the project site. No other schools are present within 1 mile of

the proposed project site. There is a proposed school in the North Highland Park area approximately 2,000 feet to the east of the project site.

2.2 - Regulatory Framework

Air pollutants are regulated to protect human health and for secondary effects such as visibility and building soiling. The Clean Air Act of 1970 tasks the United States Environmental Protection Agency (EPA) with setting air quality standards. The State of California also sets air quality standards that are, in some cases, more stringent than federal standards and address additional pollutants. The following section describes these federal and State standards and the health effects of the regulated pollutants.

2.2.1 - National and State Ambient Air Quality Standards

Regulation of air pollution is achieved through both federal and State ambient air quality standards and permitted emission limits for individual sources of air pollutants. As required by the federal Clean Air Act (CAA), the EPA has identified criteria pollutants and has established National Ambient Air Quality Standards (NAAQS) to protect public health and welfare. NAAQS have been established for ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter (specifically PM_{10} and $PM_{2.5}$), and lead. These pollutants are called “criteria” air pollutants because standards have been established for each of them to meet specific public health and welfare criteria.

To protect human health and the environment, the EPA has set “primary” and “secondary” ambient standards for each of the criteria pollutants. Primary thresholds were set to protect human health, particularly sensitive receptors, such as children, the elderly, and individuals suffering from chronic lung conditions, such as asthma and emphysema. Secondary standards were set to protect the natural environment and prevent further deterioration of animals, crops, vegetation, and buildings.

2.2.2 - Regional and Local Standards

The NAAQS establish the level for an air pollutant above which detrimental effects to public health or welfare may result. The NAAQS are defined as the maximum acceptable concentrations that, depending on the pollutant, may not be equaled or exceeded more than once per year or in some cases as a percentile of observations. California has generally adopted more stringent ambient air quality standards for the criteria air pollutants (i.e., California Ambient Air Quality Standards [CAAQS]). California has also established CAAQS for sulfates, hydrogen sulfide, and vinyl chloride; however, air emissions of these pollutants are not expected to occur under the project and, thus, these pollutants are not addressed further in this report.

Table 1 presents both sets of ambient air quality standards (i.e., national and State) as well as attainment status for each of these standards within the SJVAPCD jurisdiction. If a pollutant concentration in an area is lower than the established standard, the area is classified as being in “attainment” for that pollutant. If the pollutant concentration meets or exceeds the standard (depending on the specific standard for the individual pollutants), the area is classified as a “nonattainment” area. If

there are not enough data available to determine whether the standard is exceeded in an area, the area is designated "unclassified."

As shown in Table 1, the State attainment status for the project area, located in Kern County, is currently nonattainment/severe for 1-hour ozone standards, nonattainment for 8-hour ozone standards, nonattainment for 24-hour and annual arithmetic mean for PM_{10} standards, and nonattainment for annual arithmetic mean for $PM_{2.5}$ standards. The national attainment status for the project area is currently nonattainment/extreme for 8-hour ozone standards and nonattainment for 24-hour and annual arithmetic mean for $PM_{2.5}$ standards. State and national standards of all the other criteria pollutants are classified as attainment and/or unclassified.

Table 1: State and National Criteria Pollutant Standards and SJVAPCD Attainment Status

Pollutant	Averaging Time	California Standards		National Standards	
Ozone (O_3)	1 Hour	0.09 ppm	Nonattainment/ Severe	—	—
	8 Hour	0.070 ppm	Nonattainment	0.075 ppm	Nonattainment/ Extreme
Particulate Matter (PM_{10})	AAM	20 µg/m^3	Nonattainment	—	—
	24 Hour	50 µg/m^3	Nonattainment	150 µg/m^3	Attainment
Fine Particulate Matter ($PM_{2.5}$)	AAM	12 µg/m^3	Nonattainment	12.0 µg/m^3	Nonattainment
	24 Hour	—	—	35 µg/m^3	Nonattainment
Carbon Monoxide (CO)	1 Hour	20 ppm	Attainment	35 ppm	Attainment
	8 Hour	9.0 ppm	—	9 ppm	—
Nitrogen Dioxide (NO_2)	AAM	0.030 ppm	Attainment	0.053 ppm	Attainment
	1 Hour	0.18 ppm	Attainment	0.100 ppm	Attainment
Sulfur Dioxide (SO_2)	AAM	—	—	0.030 ppm	Attainment
	24 Hour	0.04 ppm	Attainment	—	—
	3 Hour	—	—	0.5 ppm	Attainment
	1 Hour	0.25 ppm	Attainment	0.075 ppm	Unclassified
Lead	30-day Average	1.5 µg/m^3	Attainment	—	—
	Calendar Quarter	—	—	1.5 µg/m^3	Attainment
	Rolling 3-month Average	—	—	0.15 µg/m^3	Attainment
Sulfates	24 Hour	25 µg/m^3	Attainment	No Federal Standards	

Pollutant	Averaging Time	California Standards		National Standards
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Unclassified	
Vinyl Chloride	24 Hour	0.01 ppm (42 µg/m^3)	Attainment	
Visibility-reducing Particle Matter	8 Hour	Extinction coefficient: 0.23/ kilometer- visibility of 10 miles or more (0.07–30 miles or more for Lake Tahoe) due to particles when the relative humidity is less than 70%.	Unclassified	

Notes:
µg/m^3 = micrograms per cubic meter
AAM = annual arithmetic mean
ppm = parts per million
Sources: San Joaquin Valley Air Pollution Control District (SJVAPCD) 2020 and 2018.

2.2.3 - Local Air Quality

To assess localized air quality impacts, the CO significance thresholds are based on the State CO standards, shown previously in Table 1, which are 20 parts per million (ppm) for 1-hour CO concentration levels and 9 ppm for 8-hour CO concentration levels. If CO concentration levels with the proposed project would be less than the standards, then there would be no significant impact on local air quality. If future CO concentrations with the proposed project would be above the standards, then the increase due to the project would determine if the impact would be significant or less than significant. A project would have a significant impact on local air quality if the project would result in an increase of 1 ppm or more for the 1-hour averaging time or 0.45 ppm or more for the 8-hour averaging time.

Table 2 summarizes the SJVAB exceedances of the State and federal air quality standard over the period of 2021–2023.

Table 2: San Joaquin Valley Air Basin Exceedances 2021–2023

Exceedances of California and National Ambient Air Quality Standards for Past 3 Years			
Pollutant	**2021**	**2022**	**2023**
Ozone			
Days over National 8-hour Standard	101	102	73
Days over California 8-hour Standard	104	104	104
Days over California 1-hour Standard	41	31	26
Particulate Matter			
Days over National $PM_{2.5}$ Standard	87	59	33
Days over National 24-hour PM_{10} Standard	3	1	1
Days over California 24-hour PM_{10} Standard	160	178	146
Sources: California Air Resources Board (ARB). 2025. iAdam. 2025			

Winter $PM_{2.5}$ emissions have decreased significantly, in large part due to the effectiveness of Rule 4901 (Wood-Burning Fireplaces and Wood-Burning Heaters) and the ongoing phase-out of open agricultural burning.[3]

2.2.4 - Ambient Air Monitoring

The California Air Resources Board (ARB) has established and maintains a network of sampling stations (called the State and Local Air Monitoring Stations [SLAMS] network) that work in conjunction with local air pollution control districts (in this case, SJVAPCD) to monitor ambient pollutant levels. The SLAMS network in Kern County consists of 10 stations that monitor various pollutant concentrations. The locations of these stations were chosen to meet monitoring objectives, which, for the SLAMS network, call for stations that monitor the highest pollutant concentrations, representative concentrations in areas of high population density, the impact of major pollution emissions sources, and general background concentration levels.

The primary pollutants of concern in the project area are ozone, PM_{10}, and $PM_{2.5}$ because the San Joaquin Valley is designated nonattainment for these pollutants by the EPA and/or ARB. Ten ambient air monitoring stations operate in Kern County, eight of which are in the valley portion of Kern County and two of which are in the desert portion of Kern County. Air quality data statistics from the Bakersfield-California Avenue ambient air monitoring station were used as representative of the project area's environmental setting due to the proximity of the monitoring station to the project

[3] San Joaquin Valley Air Pollution Control District (SJVAPCD). 2022. Chapter 2 Air Quality in the Valley: Challenges and Progress. Website: https://ww2.valleyair.org/media/nw2d1c3g/05-chapter-2-aqinvalley-challenges-and-progress.pdf. Accessed April 17, 2025.

(approximately 8 miles away). Ambient monitoring data showing the maximum concentrations at local monitoring stations along with the number of days the measurements exceeded the CAAQS and NAAQS are summarized below in Table 3.

Table 3: Air Quality Data Summary (2021–2023)

Air Pollutant	Averaging Time	Item	2021	2022	2023
Ozone[1]	1 Hour	Max 1 Hour (ppm)	**0.107**	**0.106**	0.089
		Days > State Standard (0.09 ppm)	**6**	**4**	0
	8 Hour	Max 8 Hour (ppm)	**0.095**	**0.09**	**0.082**
		Days > Standard (0.070 ppm)	**43**	**51**	**13**
Nitrogen dioxide (NO_2)[2]	Annual	Annual Average (ppm)	*	0.022	0.019
	1 Hour	Max 1 Hour (ppm)	0.0677	0.0676	0.0558
		Days > State Standard (0.18 ppm)	0	0	0
Inhalable coarse particles (PM_{10})[3]	Annual	National Annual Average ($\mu g/m^3$)	**50**	**44.9**	**38.8**
	24 Hour	Highest State 24 Hour ($\mu g/m^3$)	**421.4**	**149.4**	**270.4**
		Days > State Standard (50 $\mu g/m^3$)	**129**	**127**	**102**
		Days > National Standard (150 $\mu g/m^3$)	**2**	0	**1**
Fine particulate matter ($PM_{2.5}$)[1]	Annual	State Annual Average (12 $\mu g/m^3$)	*	*	**13.6**
	24 Hour	Highest Daily 24 Hour ($\mu g/m^3$)	**78.5**	**58.6**	**58**
		Days > National Standard (35 $\mu g/m^3$)	**43**	**33**	**9**

Notes:
"*" = no data
> = exceed
$\mu g/m^3$ = micrograms per cubic meter
Bold = exceedance
max = maximum
National Standard = National Ambient Air Quality Standard
ppm = parts per million
State Standard = California Ambient Air Quality Standard

1 Data is extracted from station at Oildale approximately 2 miles south of the project site.

2 Data is extracted from station at Westwind, approximately 31 miles northwest of the project site.

3 Data is extracted from station at Golden State Freeway, approximately 31 miles northwest of the project site.

4 In February 2024, the EPA announced the agency's proposed rule change of reducing the primary annual $PM_{2.5}$ National Ambient Air Quality Standard (NAAQS) from 12 $\mu g/m^3$ to 9 $\mu g/m^3$. Meanwhile, the monitoring data available before year 2024 would be compared with the previous standard of 12 $\mu g/m^3$.

Source: California Air Resources Board (ARB). Top Four Summary. Website: https://www.arb.ca.gov/adam/topfour/topfour1.php. Accessed April 10, 2025.

CO and SO_2 concentrations were not available at any nearby monitoring station. In general, criteria pollutants that are not monitored are considered to not be a concern for the area.

2.2.5 - Criteria Air Pollutants

Table 4 shows a general description of the source and health effects from the government regulated criteria air pollutants of O_3; reactive organic gases (ROGs) and volatile organic compounds (VOCs), carbon monoxide (CO), NO_2, SO_2, particulate matter (specifically PM_{10} and $PM_{2.5}$), sulfates, and lead (Pb).

Table 4: Sources and Health Effects of Common Air Pollutants

Criteria Pollutant	Most Relevant Effects from Pollutant Exposure	Sources
Ozone (O_3)	• Respiratory symptoms • Worsening of lung disease leading to premature death • Damage to lung tissue	• On-road and off-road mobile vehicle exhausts • Factories and industrial facilities • Consumer products
Particulate matter (PM_{10})	• Premature death and hospitalization, primarily for worsening of respiratory disease • Reduced visibility and material soiling	• Gasoline- and diesel-powered mobile vehicles • Dust from construction sites, landfills, and agriculture • Combustion from oil • Burning wood and wildfires • Burning of brushes and wastes • Factories and industrial facilities
Particulate matter ($PM_{2.5}$)	• Premature death • Hospitalization for worsening of cardiovascular disease • Hospitalization for respiratory disease • Asthma-related emergency room visits • Increased symptoms, increased inhaler usage	• Gasoline- and diesel-powered mobile vehicles • Combustion from oil and wood
Nitrogen dioxide (NO_2)	• Lung irritation • Intensified allergic responses	• Motor vehicle internal combustion engines • Fossil fuel-fired electric utility and industrial boilers
Carbon monoxide (CO)	• Chest pain in patients with heart disease • Headache • Lightheadedness • Reduced mental alertness	• Motor vehicle internal combustion engines • Fossil fuel-fired electric utility and industrial boilers
Sulfur dioxide (SO_2)	• Worsening of asthma: increased symptoms, increased medication usage, and emergency room visits	• Combustion of sulfur-containing fuel from motor vehicles, locomotives, ships, and off-road diesel equipment • Industrial processes • Geothermal fields

Criteria Pollutant	Most Relevant Effects from Pollutant Exposure	Sources
Lead (Pb)	• Impaired mental functioning in children • Learning disabilities in children • Brain and kidney damage	• Lead smelters • Piston-engine aircraft operating on leaded aviation gasoline • Waste incinerators • Utilities • Lead-acid battery manufacturers • Dust from soils contaminated with lead-based paint
Source: California Air Resources Board (ARB). 2023. Common Air Pollutants.		

2.2.6 - Toxic Air Contaminants

TACs, as known under the California Clean Air Act of 1988 (CCAA), are pollutants that have been identified through ambient air quality data as posing the most substantial health risk in California. Direct exposure to these pollutants has been shown to cause cancer, birth defects, damage to the brain and nervous system, and respiratory disorders. The ARB provides TAC emission inventories for only the larger air basins.

Sources include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners and motor vehicle exhaust. TACs do not have ambient air quality standards. Since no safe levels of TACs can be determined, there are no air quality standards for TACs. Instead, TAC impacts are evaluated by calculating the health risks associated with a given exposure. The requirements of the Air Toxic “Hot Spots” Information and Assessment Act apply to facilities that use, produce, or emit toxic chemicals. Facilities that are subject to the toxic emission inventory requirements of the Act must prepare and submit toxic emission inventory plans and reports to the ARB and periodically update those reports. The major TAC that affects health impacts in the air from typical construction and operational activities is diesel particulate matter (DPM). DPM from the operation of diesel trucks and heavy construction equipment has been identified by the ARB as a carcinogen that can result in long-term health impacts (see discussion below). According to the ARB, it is estimated that approximately 70 percent of total known cancer risk related to air toxics in California is attributable to DPM. Therefore, the primary TAC of concern for the proposed project would be diesel exhaust, characterized by the emissions of DPM as a surrogate.

Diesel Particulate Matter

As stated, studies indicate that DPM poses the greatest health risk among the TACs listed above. A 10-year research program demonstrated that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic health risk.[4] In addition to

[4] California Air Resources Board (ARB). 1998. The Toxic Air Contaminant Identification Process: Toxic Air Contaminant

increasing the risk of lung cancer, exposure to diesel exhaust can have other health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. Diesel exhaust is a major source of fine particulate pollution as well, and studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems.

DPM is emitted from both mobile and stationary sources. In California, on-road diesel-fueled engines contribute approximately 24 percent of the Statewide total, with an additional 71 percent attributed to other mobile sources such as construction and mining equipment, agricultural equipment, and TRUs. Stationary sources contribute about 5 percent of total DPM.

Health Effects

Diesel exhaust and many individual substances contained in it (including arsenic, benzene, formaldehyde, and nickel) have the potential to contribute to mutations in cells that can lead to cancer. Long-term exposure to diesel exhaust particles poses the highest cancer risk of any TAC evaluated by the California Office of Environmental Health Hazard Assessment (OEHHA). The ARB estimates that approximately 70 percent of the cancer risk that the average Californian faces from breathing TACs stems from diesel exhaust particles.

In its comprehensive assessment of diesel exhaust, OEHHA analyzed more than 30 studies of people who worked around diesel equipment, including truck drivers, railroad workers, and equipment operators. The studies showed these workers were more likely to develop lung cancer than workers who were not exposed to diesel emissions. These studies provide strong evidence that long-term occupational exposure to diesel exhaust increases the risk of lung cancer. Using information from OEHHA's assessment, ARB estimates that diesel-particle levels measured in California's air in 2000 could cause 540 "excess" cancers (beyond what would occur if there were no diesel particles in the air) in a population of one million people over a 70-year lifetime. Other researchers and scientific organizations, including the National Institute for Occupational Safety and Health, have calculated similar cancer risks from diesel exhaust as those calculated by OEHHA and ARB.

Exposure to diesel exhaust can have immediate health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. In studies with human volunteers, diesel exhaust particles made people with allergies more susceptible to the materials to which they are allergic, such as dust and pollen. Exposure to diesel exhaust also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks.

Emissions from Diesel-fueled Engines. Website: https://ww2.arb.ca.gov/sites/default/files/classic/toxics/dieseltac/finexsum.pdf. Accessed April 17, 2025.

2.2.7 - Valley Fever

Coccidioidomycosis, or Valley Fever, is a well-studied fungal infection caused by inhaling spores of *Coccidioides immitis*, which thrive in dry, alkaline soils and become airborne through wind or ground disturbance. It affects both humans and animals, particularly those exposed to dust—like outdoor workers and active individuals in hot, arid regions. Once inhaled, spores settle in the lungs, forming spherules that release endospores, continuing the infection cycle. About 60 percent of cases are mild or asymptomatic, while others experience flu-like symptoms, rash, or joint pain, though these signs are not unique to Valley Fever. Diagnosis requires lab tests such as microscopic identification, cultures, serological testing, or a skin test. The disease is not contagious and most recover within six months with lasting immunity, but severe cases may need antifungal treatment—ranging from azoles for mild disease to amphotericin B for aggressive infections—which can require prolonged therapy. Range of Valley Fever cases are listed below in Table 5.

Table 5: Range of Valley Fever Cases

AQI Range	Pollutant Specific Sensitive Groups
Unapparent infections	60 percent
Mild to moderate infections	30 percent
Infections resulting in complications	5–10 percent
Fatal infections	<1 percent
Source: Valley Fever Center for Excellence. Check for Complications. Website: https://vfce.arizona.edu/valley-fever-people/check-complications. Accessed April 17, 2025.	

2.2.8 - Asbestos

Asbestos is a term used for several types of naturally occurring fibrous minerals found in many parts of California. The three most common types of asbestos are chrysotile, amosite, and crocidolite. Chrysotile, also known as white asbestos, is the most common type of asbestos found in buildings. Chrysotile makes up approximately 90 to 95 percent of all asbestos contained in buildings in the United States. In addition, naturally occurring asbestos can be released from serpentinite and ultramafic rocks when the rock is broken or crushed. At the point of release, the asbestos fibers may become airborne, causing air quality and human health hazards. These rocks have been commonly used for unpaved gravel roads, landscaping, fill projects, and other improvement projects in some localities. Asbestos may be released to the atmosphere due to vehicular traffic on unpaved roads, during grading for development projects, and at quarry operations. Serpentinite and/or ultramafic rock are known to be present in 44 of California's 58 counties. These rocks are particularly abundant in the counties associated with the Sierra Nevada foothills, the Klamath Mountains, and Coast Ranges. According to information provided by the California Department of Conservation, Division of Mines

and Geology, the project site is not located in an area where naturally occurring asbestos is likely to be present.

2.3 - Air Quality Regulatory Setting

In California, air quality is regulated by several agencies, including EPA, ARB, and local air districts such as the SJVAPCD. Each of these agencies develops rules and/or regulations to attain the goals or directives imposed upon them through legislation. Although EPA regulations may not be superseded, some State and local regulations may be more stringent than federal regulations. The project site is located within the SJVAB, which is under the jurisdiction of the SJVAPCD. The SJVAPCD has developed CEQA guidance for assessing air quality impacts. In addition, Kern County has its own CEQA Guidelines for assessing air quality impacts.[5]

2.3.1 - Federal

United States Environmental Protection Agency

The principal air quality regulatory mechanism on the federal level is the CAA and the 1990 amendments to the CAA and the NAAQS that it establishes. These standards identify levels of air quality for "criteria" pollutants that are considered the maximum levels of ambient (background) air pollutants considered safe, with an adequate margin of safety, to protect the public health and welfare. The criteria pollutants include ozone, CO, NO_2 (which is a form of NO_x), SO_2 (which is a form of SO_x), PM_{10}, $PM_{2.5}$, and lead. The EPA also has regulatory and enforcement jurisdiction over emission sources beyond State waters (outer continental shelf), and those that are under the exclusive authority of the federal government, such as aircraft, locomotives, and interstate trucking. The EPA's primary role at the State level is to oversee the State air quality programs. The EPA sets federal vehicle and stationary source emission standards and oversees approval of all State Implementation Plans (SIPs), as well as providing research and guidance in air pollution programs. The SIP is a State-level document that identifies all air pollution control programs within California that are designed to meet the NAAQS.

2.3.2 - State

California Air Resources Board

The ARB, a department of the California Environmental Protection Agency (Cal/EPA), oversees air quality planning and control throughout California by administering the SIP. Its primary responsibility lies in ensuring implementation of the 1989 amendments to the CCAA, responding to the federal CAA requirements and regulating emissions from motor vehicles sold in California. The ARB also sets fuel specifications to further reduce vehicular emissions.

[5] Kern County. 2006. Planning Department. Website: http://kernair.org/Documents/CEQA/AirQualityAssessmentPreparationGuidelines.pdf. Accessed April 17, 2025.

The amendments to the CCAA establish the CAAQS and a legal mandate to achieve these standards by the earliest practical date. These standards apply to the same criteria pollutants as the federal CAA and also include sulfates, visibility-reducing particulates, hydrogen sulfide, and vinyl chloride (there are currently no NAAQS for these latter pollutants). They are also generally more stringent than the national standards in most cases, although recently promulgated NAAQS for 1-hour NO_2 and SO_2 can in some instances be more stringent than the respective CAAQS.

The ARB is also responsible for regulations pertaining to TACs. The Air Toxics "Hot Spots" Information and Assessment Act (Assembly Bill [AB] 2588) was enacted in 1987 as a means to establish a formal air toxics emission inventory risk quantification program. AB 2588, as amended, establishes a process that requires stationary sources to report the type and quantities of certain substances their facilities routinely release into their local air basin. Each Air Pollution Control District (APCD) and Air Quality Management District (AQMD) in the State ranks the data into high, intermediate, and low priority categories. When considering the ranking, the potency, toxicity, quantity, volume, and proximity of the facility to receptors are given consideration by an air district.

The ARB also has on- and off-road engine emission reduction programs that would indirectly affect the project's emissions through the phasing in of cleaner on- and off-road engines. Additionally, the ARB has a Portable Equipment Registration Program that allows owners or operators of portable engines and associated equipment to register their units under a Statewide program to operate their equipment which must meet specified program emission requirements, throughout California without having to obtain individual permits from local air districts. Since the project is not proposing to install any applicable stationary sources, the AB 2588 program would not apply to the project.

In 2007, the ARB enacted a regulation for the reduction of DPM and criteria pollutant emissions from in-use off-road diesel-fueled vehicles.[6] This regulation provides target emission rates for particulate matter and NO_X emissions for owners of fleets of diesel-fueled off-road vehicles. It applies to equipment fleets of three specific sizes, and the target emission rates are reduced over time with full implementation by 2023 for large and medium fleets and 2028 for small fleets.

In California, the ARB takes a more comprehensive approach to regulating TACs. ARB's regulations not only target emissions from industrial and mobile sources but also address land use and development sources. This includes conducting HRAs for new developments to ensure they do not negatively impact air quality and public health.

Air Toxics Hot Spots Information and Assessment Act (AB 2588)

The Hot Spots program requires selected categories of stationary sources to report the types and quantities of certain substances they release into the air. The goals are to collect emission data,

[6] South Coast Air Quality Management District (South Coast AQMD). 2014. 13 California Code of Regulations Article 4.8, Chapter 9, Rule 2449. Control Of Oxides Of Nitrogen Emissions From Off-Road Diesel Vehicles. Website: https://www.aqmd.gov/docs/default-source/rule-book/reg-xxiv/rule-2449.pdf. Accessed April 17, 2025.

identify facilities with localized impacts, assess health risks, notify nearby residents of significant risks, and reduce those risks to acceptable levels.

While development projects are not covered under the Hot Spots program, CEQA also uses the risk assessment methodologies and approved health values developed under the program to evaluate the potential health impacts of new developments, ensuring that land use and development projects do not exacerbate air quality issues.

Air Toxic Control Measures

California has implemented several Airborne Toxic Control Measures (ATCMs) specifically targeting internal combustion engines, diesel trucks, and gas stations to control TACs and protect public health. Some key ATCMs relevant to the proposed project include:

- **Stationary Compression Ignition Engine ATCM:** This measure applies to stationary diesel-fueled compression ignition (CI) engines used in various operations. It aims to reduce emissions of DPM and other pollutants by requiring the use of best available control technologies and regular maintenance.[7]
- **ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling:** Requires that drivers of diesel-fueled commercial motor vehicles with gross vehicle weight ratings greater than 10,000 pounds, including buses and sleeper berth equipped trucks, not idle the vehicle's primary diesel engine longer than 5 minutes at any location.[8]
- **In-Use Off-Road Diesel-Fueled Fleets Regulation:** This regulation applies to all self-propelled off-road diesel vehicles 25 horsepower (hp) or greater used in California. It aims to reduce emissions from older, high-emitting engines by requiring fleet owners to upgrade to newer, cleaner technologies.[9]
- **ATCM for In-Use Diesel-Fueled TRU and TRU Generator Sets, and Facilities Where TRUs Operate**: This measure targets diesel-powered TRUs used in trucks, trailers, shipping containers, and railcars. It aims to reduce DPM and other pollutants by requiring the use of low emission technologies and promoting zero-emission alternatives.[10] TRUs are temperature control systems powered by small (typically 9 to 36 hp) diesel internal combustion engines. Despite their small individual size, TRUs are often active in dense congregations around distribution centers, truck stops, and other facilities, resulting in a significantly greater

[7] California Air Resources Board (ARB). 2024. Stationary Diesel ATCM. Website: https://ww2.arb.ca.gov/our-work/programs/stationary-diesel-atcm. Accessed April 17, 2025.

[8] California Air Resources Board (ARB). 2008. ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling. Website: https://www.arb.ca.gov/regact/idling/idling.htm. Accessed April 21, 2025.

[9] California Air Resources Board (ARB). 2024. In-Use Off-Road Diesel-Fueled Fleets Regulation. Website: https://ww2.arb.ca.gov/our-work/programs/use-road-diesel-fueled-fleets-regulation. Accessed April 17, 2025.

[10] California Air Resources Board (ARB).2024. 2022 Amendments to the Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities Where TRUs Operate. Website: https://ww2.arb.ca.gov/resources/fact-sheets/2022-amendments-tru-atcm. Accessed April 17, 2025.

combined loading. This ATCM focused on the reduction of diesel particulate emissions as a toxic in order to improve air quality around these centers. Additionally, transitioning diesel TRUs to zero-emissions technologies is a priority because of Executive Order N-79-20, which set a goal of 100 percent zero-emission off-road vehicles and equipment in California by 2035.[11]

AB 98 (2024) and SB 415 (2025)

AB 98, signed into law in September 2024, established California's first comprehensive Statewide design and operational standards for new and expanded logistics developments, including warehouses and distribution centers. In response to implementation challenges, SB 415 was adopted in 2025 to clarify and refine AB 98's provisions. Key requirements for logistics projects include the installation of energy-saving features such as solar panels and EVCS, a mandated transition to zero-emission forklifts by 2030, and mandatory setbacks for loading bays, especially when located within 900 feet of sensitive receptors like homes, schools, and hospitals. SB 415 also affirms that screening walls, landscape buffers, and tree planting are baseline, non-waivable mitigation measures. In addition, the laws require cities and counties to update their general plan circulation elements by 2028 to identify and designate truck routes that minimize impacts on nearby communities. These laws are part of the State's broader effort to reduce emissions, address environmental justice concerns, and improve public health in communities disproportionately impacted by freight activity. The requirements do not apply to existing logistics facilities or to projects that had completed the local entitlement process prior to September 30, 2024.AB 617

AB 617, known as the Community Air Protection Program, was enacted to address air pollution in California's most impacted communities. This legislation focuses on reducing exposure to TACs and other pollutants in disadvantaged areas. AB 617 mandates the development of community-specific air monitoring and emission reduction programs, ensuring that local residents have a say in the process.[12, 13] It also enhances enforcement of existing air quality regulations and promotes the use of cleaner technologies. Projects located in ARB Community Air Risk Evaluation (CARE) areas have more stringent requirements compared to those in non-CARE areas, including more stringent requirements for HRAs, community engagement and more aggressive emission reduction measures. The proposed project is not located within a CARE or AB 617-identified community.

Title V and Extreme Designation

Title V of the CAA, as amended in 1990, creates an operating permit program for certain defined sources. In general, owner/operators of defined industrial or commercial sources that emit more than 25 tons per year of NO_X and ROG must process a Title V permit. In "Extreme Designation" areas, the definition of a major source which requires Title V permitting, changes from 25 tons per year to

[11] California Air Resources Board (ARB). 2022. TRU Rulemaking Activity. Website: https://ww2.arb.ca.gov/tru-rulemaking-activity. Accessed April 20, 2025.

[12] California Air Resources Board (ARB). 2024. Community Air Protection Program. Website: https://ww2.arb.ca.gov/capp. Accessed April 17, 2025.

[13] Bay Area Air Quality Management District (Bay Area Air District). 2024. Community Health Protection Program. Website: https://www.baaqmd.gov/community-health/community-health-protection-program. Accessed April 17, 2025.

10 tons per year. This change results in more businesses having to comply with Title V permitting requirements under the Extreme nonattainment designation.

Title V does not impose any new air pollution standards, require installation of any new controls on the affected facilities, or require reductions in emissions. Title V does enhance public and EPA participation in the permitting process and requires additional record keeping and reporting by businesses, which results in significant administrative requirements.

2.3.3 - Regional

San Joaquin Valley Air Pollution Control District

The SJVAPCD is responsible for controlling emissions primarily from stationary sources within the SJVAB. The SJVAPCD, in coordination with the eight countywide transportation agencies, is also responsible for developing, updating, and implementing air quality attainment plans for the SJVAB. The SJVAPCD also has roles under CEQA.

The SJVAPCD attains and maintains air quality conditions in the SJVAB through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The clean air strategy of the SJVAPCD includes preparation of plans for attainment of ambient air quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, and issuance of permits for stationary sources of air pollution. The SJVAPCD also inspects stationary sources of air pollution and responds to citizen complaints; monitors ambient air quality and meteorological conditions; and implements programs and regulations required by the federal CAA and CCAA.

The SJVAPCD has adopted developed numerous plans to identify measures needed to attain the increasingly stringent federal and State standards.[14] Most recently adopted plans include the following: :

- The 2024 Plan for the 2012 Annual $PM_{2.5}$ Standard.
- The 2018 Plan for the 1997, 2006, and 2012 $PM_{2.5}$ Standard.
- Ozone Contingency Measure State Implementation Plan Revision for the 2008 and 2015 8-Hour Ozone Standards.
- 2022 Plan for the 2015 8-Hour Ozone Standard.
- The 2004 Revisions to the Carbon Monoxide Maintenance Plan.

[14] San Joaquin Valley Air Pollution Control District (SJVAPCD). 2025. Air Quality Attainment Plans. Website: https://www.valleyair.org/rules-and-planning/air-quality-plans/. Accessed June 25, 2025.

San Joaquin Valley Air Pollution Control District Rules and Regulations

The SJVAPCD Rules and Regulations that may apply during buildout of the project include, but are not limited to the following:

Rule 4102 Nuisance

The purpose of this rule is to protect the health and safety of the public and applies to any source operation that emits or may emit air contaminants or other materials.

Rule 4601 Architectural Coatings

The purpose of this rule is to limit volatile organic compounds (VOC) emissions from architectural coatings. Emissions are reduced by limits on VOC content and providing requirements on coatings storage, cleanup, and labeling.

Rule 4641 Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations

The purpose of this rule is to limit VOC emissions from asphalt paving and maintenance operations.

If asphalt paving would be used, then the paving operations would be subject to Rule 4641.

Rule 4702 Internal Combustion Engines

This rule applies to any internal combustion engine rated at 25 brake horsepower or greater. Emergency generators cannot be used to reduce the demand for electrical power when normal electrical power line service has not failed, to produce power for the utility electrical distribution system, or in conjunction with a voluntary utility demand reduction program or interruptible power contract. The rule limits emergency generators to 100 hours of operation for non-emergency usage, which is less stringent than the ATCM for emergency standby stationary engines under 17 California Code of Regulations 93115. Therefore, compliance with the ATCM ensures compliance with the 100-hour requirement**.**

Regulation VIII Fugitive PM_{10} Prohibitions

Rules 8011–8081 are designed to reduce PM_{10} emissions (predominantly dust/dirt) generated by human activity, including construction and demolition activities, road construction, bulk materials storage, paved and unpaved roads, carryout and track out, etc. All development projects that involve soil disturbance are subject to at least one provision of the Regulation VIII series of rules.

Rule 9410 Employer Based Trip Reduction

The purpose of Rule 9410 is to reduce emissions of ozone precursors (NO_X and VOC) and PM from mobile sources. The rule applies to employers with at least 100 eligible employees at a worksite and requires employers to establish an Employer Trip Reduction Implementation Plan (eTRIP) to encourage employees to reduce single-occupancy vehicle trips, thus reducing pollutant emissions associated with work commutes. Rule 9410 (Employer Based Trip Reduction) satisfies a federally-enforceable commitment in District State Implementation Plans (the 2007 Ozone Plan and the 2008 $PM_{2.5}$ Plan) and is designed to share the air pollution cleanup burden traditionally targeted at stationary sources. The rule applies to worksites with over 100 employees in incorporated cities with a population of at least 10,000 people OR worksites where at least 50 percent of all employees work at least 2,040 hours per year.

Rule 9510 Indirect Source Review

The purpose of Rule 9510 is to reduce emissions of NO_X and PM_{10} from new development projects. The rule applies to development projects that, upon full buildout, seek to gain discretionary approval for any one of the following: 50 residential units, 2,000 square feet of commercial space, 25,000 square feet of Light Industrial (LI) space, 20,000 square feet of medical or recreational space, 39,000 square feet of general office space, 100,000 square feet of heavy industrial space, 9,000 square feet of educational space, 10,000 square feet of government space, or 9,000 square feet of any land use not identified above. Several sources are exempt from the rule, including transportation projects and transit projects (exempt only from Rule 9510 Section 6.2 and Section 7.1.2), reconstruction projects that result from a natural disaster, and development projects whose primary source of emissions are subject to SJVAPCD Rules 2201 and 2010, which address stationary sources. Any development project that has a mitigated baseline of less than 2 tons per year (TPY) for NO_X and PM_{10} is also exempted from the mitigation requirements of the rule. Developers are encouraged to reduce as much air pollution as possible through on-site mitigation or the incorporation of air-friendly designs and practices into the project. Some examples include bike paths and sidewalks; traditional street design; medium- to high-density residential developments; locating near bus stops and bike paths; locating near different land use zones, such as commercial; and increasing energy efficiency. If these practices do not completely meet the required reductions (under the rule), new development projects are required to mitigate the remainder of their emissions by contributing to a mitigation fund that would be used to pay for the most cost-effective projects to reduce emissions. Examples include projects to retire or crush polluting cars, replace older diesel engines, and replace gas-powered lawnmowers with electric lawnmowers.

> The Indirect Source Review (ISR) requires developers to reduce 20 percent of construction exhaust NO_X; 45 percent of construction exhaust PM_{10}; 33 percent of operational NO_X over 10 years; and 50 percent of operational PM_{10} over 10 years.

The SJVAPCD has also implements federal National Emission Standard for Hazardous Air Pollutants (NESHAP) and State ATCMs that control the emissions of naturally occurring asbestos through the following programs:

Indirect Source Mitigation Fee

Indirect sources are land uses that attract or generate motor vehicles trips. Indirect source emissions contain many pollutants, principally PM_{10}, ROG, and NO_X. The SJVAPCD included a requirement in the adopted 2003 PM_{10} Plan to develop and implement an ISR rule by July 2004, with implementation to begin in 2005. The ISR rule went into effect in March 2006. Senate Bill (SB) 709 required the SJVAPCD to adopt by regulation a schedule of fees to be assessed on area-wide and indirect sources of emissions. After public hearings, the SJVAPCD adopted Rule 9510 on December 15, 2005.

Asbestos Dust Mitigation Plan

An Asbestos Dust Mitigation Plan is required for grading/construction projects which involve the disturbance of asbestos-containing soil in areas greater than 1 acre. This is different from the District's Dust Control Plan that is implemented as part of Regulation VIII.

Rule 4002: NESHAPS Asbestos Regulation

This rule requires that the subject facilities be inspected for asbestos prior to remodeling. Regulated asbestos-containing materials (RACM) must be removed prior to remodeling work. Furthermore, a demolition permit release is required prior to obtaining a building department demolition permit.

California Environmental Quality Act

The SJVAPCD also provides guidance and thresholds for CEQA air quality and GHG analyses. The result of this guidance, as well as State regulations to control air pollution, is an overall improvement in the SJVAB. In particular, the SJVAPCD's 2015 Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI) states the following:[15]

1. The SJVAPCD's Air Quality Attainment Plans include measures to promote air quality elements in county and city general plans as one of the primary indirect source programs. The general plan is the primary long-range planning document used by cities and counties to direct development. Since air districts have no authority over land use decisions, it is up to cities and counties to ensure that their general plans help achieve air quality goals. Section 65302.1 of the California Government Code requires cities and counties in the San Joaquin Valley to

[15] San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. Website: https://ww2.valleyair.org/media/g4nl3p0g/gamaqi.pdf. Accessed April 17, 2025.

amend appropriate elements of their general plans to include data, analysis, comprehensive goals, policies, and feasible implementation strategies to improve air quality in their next housing element revisions.

2. The Air Quality Guidelines for General Plans (Air Quality Guidelines), adopted by the SJVAPCD in 1994 and amended in 2005, is a guidance document containing goals and policy examples that cities and counties may want to incorporate into their General Plans to satisfy Section 65302.1. When adopted in a general plan and implemented, the suggestions in the Air Quality Guidelines can reduce vehicle trips and miles traveled and improve air quality. The specific suggestions in the Air Quality Guidelines are voluntary. The SJVAPCD strongly encourages cities and counties to use their land use and transportation planning authority to help achieve air quality goals by adopting the suggested policies and programs.

2.3.4 - Local

Construction and operation of the proposed project's warehouse facilities would be subject to policies and regulations contained within the general and specific plans, including the Metropolitan Bakersfield General Plan, Kern County Zoning Ordinance, and the Kern County Code of Building Regulations, which include policies, goals, and implementation measures related to air quality. The Kern County General Plan contains additional policies, goals, and implementation measures related to air quality that are more general in nature and not specific to development, such as the project.

Metropolitan Bakersfield General Plan (Unincorporated Area)

The Bakersfield Metropolitan General Plan states that planning for compliance with the federal and State ambient air quality standards has been assigned to the SJVAPCD, who, with the assistance of the Kern Council of Governments (Kern COG), prepared the Air Quality Attainment Plan (AQAP) for ozone and carbon monoxide and PM_{10} Nonattainment Area Plan (NAP) for the SJVAB. The AQAP/NAP focuses on air pollutants for which there are federal standards. Among the actions recommended in the AQAP/NAP are policies and programs which localities can undertake to help improve air quality. Local jurisdictions are encouraged to incorporate these policies in their general plans, and to adopt supplementary policies as appropriate.

The plan includes the following relevant goals and policies with respect to Air Quality.

Chapter V: Conservation/Air Quality

Goals

Goal 1 Promote air quality that is compatible with health, wellbeing, and enjoyment of life by controlling point sources and minimizing vehicular trips to reduce air pollutants.

Goal 2 Continue working toward attainment of Federal, State and Local standards as enforced by the San Joaquin Valley Air Pollution Control District.

Goal 3 Reduce the amount of vehicular emissions in the planning area.

Policies

Policy 1 Comply with and promote San Joaquin Valley Air Pollution Control District (SJVAPCD) control measures regarding reactive organic gases (ROG). Such measures are focused on: (a) steam driven well vents, (b) Pseudo-cyclic wells, (c) natural gas processing plant fugitives, (d) heavy oil test stations, (e) light oil production fugitives, (f) refinery pumps and compressors, and (g) vehicle inspection and maintenance.

Policy 3 Require dust abatement measures during significant grading and construction operations.

Policy 4 Consider air pollution impacts when evaluating discretionary permits for land use proposals. Considerations should include:

a. Alternative access routes to reduce traffic congestion.
b. Development phasing to match road capacities.
c. Buffers include increasing vegetation to increase emission dispersion and reduce impacts of gaseous or particulate matter on sensitive uses.

Policy 5 Consider the location of sensitive receptors such as schools, hospitals, and housing developments when locating industrial uses to minimize the impact of industrial sources of air pollution.

Policy 7 Participate in regional air quality studies and comprehensive programs for air pollution reduction.

Policy 10 Implement the Transportation System Management Program (July 1984) for Metropolitan Bakersfield to improve traffic flow, reduce vehicle trips and increase street capacity.

Policy 11 Improve the capacity of the existing road system through improved signalization, more right turn lanes and traffic control systems.

Policy 12 Encourage the use of mass transit, carpooling and other transportation options to reduce vehicle miles traveled.

Policy 13 Consider establishing priority parking areas for carpoolers in projects with relatively large numbers of employees to reduce vehicle miles traveled and improve air quality.

Policy 14 Establish park and ride facilities to encourage carpooling and the use of mass transit.

Policy 15 Promote the use of bicycles by providing attractive bicycle paths and requiring provision of storage facilities in commercial and industrial projects.

Policy 18 Encourage walking for short distance trips through the creation of pedestrian friendly sidewalks and street crossings.

Policy 19 Promote a pattern of land uses which locates residential uses in close proximity to employment and commercial services to minimize vehicular travel (I-1).

Policy 22 Require the provision of secure, convenient bike storage racks at shopping centers, office buildings, and other places of employment in the Bakersfield Metropolitan area.

Policy 23 Encourage the provision of shower and locker facilities by employers, for employees who bicycle or jog to work.

Policy 25 Require design of parking structures and ramps to provide adequate off-street storage for entering vehicles to minimize on-street congestion and to avoid internal backup and idling of vehicles.

Policy 29 Encourage the use of alternative fuel and low or zero-carbon emission vehicles.

Kern County

In 2006, Kern County Planning Department issued its own Guidelines for Preparing an Air Quality Assessment for Use in Environmental Impact Reports. The document provides specific guidance for County-prepared EIRs, including air quality issues to be considered, analytical approaches and resources, and a cumulative impact analysis methodology. In general, Kern County defers to SJVAPCD on issues related to assessing air quality impacts (e.g., modeling, odors, risk assessment). In addition, Kern County recommends an assessment of visibility impacts for all industrial projects and any other projects that have components that could generate dust or emissions related to visibility. Kern County also recommends including a list of projects located within a 1-mile and 6-mile radius of the project boundary.

Air Quality Conformity Determination for Transportation Plans and Programs

The CAA amendments of 1990 require a finding to be made stating that any project, program, or plan subject to approval by a Metropolitan Planning Organization (MPO) conforms to air plans for attainment of air quality standards. Kern COG is designated the Regional Transportation Planning Agency and MPO for Kern County. In that capacity, Kern COG models air quality projections on population projections in conjunction with current general plan designations and estimated vehicle miles as well as the current Regional Transportation Plan (RTP) and the federal transportation plan for Kern County. These results are compared to pollutant budgets for each basin approved by the EPA in the 1999 base year. Kern County is contained within two air basins: SJVAB and the Mojave Desert Air Basin. Each air basin has its own plans and pollutant budgets. Kern COG makes conformity findings for each air basin.

The latest adopted RTP is the 2022 RTP, a 24-year blueprint that establishes a set of regional transportation goals, policies, and actions intended to guide development of the planned multimodal transportation systems in Kern County.[16] It has been developed through a federally required continuing, comprehensive, and cooperative planning process, and provides for effective coordination between local, regional, State, and federal agencies. Included in the 2022 RTP is the Sustainable Communities Strategy (SCS) required by California's Sustainable Communities and Climate Protection Act of SB 375. The ARB set targets for Kern's GHG emissions reductions from passenger vehicles and light-duty trucks at 9 percent per capita by 2020 and 15 percent per capita by 2035 as compared to 2005.

The plan is accompanied by a program level environmental document that analyzes cumulative impacts, and the regional air quality conformity analysis required by federal regulations. The conformity report includes a regional emissions analysis conducted for the years 2022, 2023, 2024, 2025, 2026, 2029, 2031, 2037 and 2046 for each applicable pollutant. The conformity findings conclude that the Federal Transportation Improvement Program (FTIP) and RTP result in emissions that are less than the emission budgets of baseline emissions for CO, VOC, NO_X, and PM_{10}.[17] The 2023 FTIP and the 2022 RTP would not impede and would support timely implementation of the Transportation Control Measures (TCMs) that have been adopted as part of applicable air quality implementation plans.

Kern County Public Health Services Department

Section 101080 of the California Health and Safety Code authorizes a local health officer to declare a local health emergency in the health officer's jurisdiction, or any part thereof, when the health officer determines that there is an imminent and proximate threat of the introduction of any contagious, infections, or communicable disease, chemical agent, noncommunicable biological agent, toxin, or radioactive agent.

[16] Kern Council of Governments (Kern COG). 2022. Regional Transportation Plan/Sustainable Communities Strategy. Website: https://www.kerncog.org/wp-content/uploads/2022/12/2022_RTP.pdf. Accessed April 17, 2025.

[17] Kern Council of Governments (Kern COG). 2022. California 2023 FSTIP Approval. Website: https://www.kerncog.org/wp-content/uploads/2022/08/Kern_2022_2023_FTIP-RTP_Conformity.pdf. Accessed April 17, 2025.

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3 - CLIMATE CHANGE SETTING

This section describes existing climate conditions as well as the relevant regulatory framework. The "Environmental Setting" provides a description of GHG emissions and the current state of the climate. The "Regulatory Framework" provides a description of relevant federal, State, and local regulatory policies that serve to reduce GHG emissions and are applicable to the proposed project.

3.1 - Environmental Setting

Earth's temperature is rising,[18] and although the global climate has varied over the long-range time scale, there is strong scientific consensus that the rapid heating in recent decades is both unusual and caused by emissions of GHGs from human activities such as the burning of fossil fuels including coal and oil.[19] Gases that trap heat in the atmosphere are referred to as GHGs. The effect is analogous to the way a greenhouse retains heat. Prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons, chlorofluorocarbons, and sulfur hexafluoride. Atmospheric concentrations of CO_2, the most prominent GHG, have been increasing rapidly in recent decades, from approximately 280 parts per million (ppm) before the start of the Industrial Revolution in the 1760s, to more than 400 ppm as of 2013.[20] According to the Intergovernmental Panel on Climate Change (IPCC), it is *extremely unlikely* that global climate change of the past 50 years can be explained without the contribution from human activities.

As the concentration of these gases continues to increase in the atmosphere, Earth's temperature has increased by about 1.2 to 1.4 (°F) degrees Fahrenheit since 1900.[21] Even if GHG emissions could be reduced to zero overnight, global temperatures will continue to rise in future years due to the buildup of GHGs that have already accumulated in the atmosphere and the oceans. As future emissions increase the atmospheric concentrations of CO_2 and other GHGs, the impacts of the warming greenhouse effect are projected to steadily worsen.

Global climate change is not confined to a particular project area and is generally accepted as the consequence of global industrialization over the last 200 years. A typical project, even a very large one, does not generate enough GHG emissions on its own to influence global climate change

[18] National Centers for Environmental Information (NCEI) National Oceanic and Atmospheric Administration (NOAA). 2024. Website: https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/global/time-series. Accessed April 17, 2025.

[19] K. Myers, et al., 2021. Consensus revisited: quantifying scientific agreement on climate change and climate expertise among Earth scientists 10 years later, Environmental Research Letters Vol.16 No. 10, 104030 (20 October 2021); DOI:10.1088/1748-9326/ac2774. Accessed April 17, 2025.

[20] Global Monitoring Library, National Oceanic and Atmospheric Administration (NOAA). 2024. Website: https://www.noaa.gov/news-release/greenhouse-gases-continued-to-increase-rapidly-in-2022. Accessed April 17, 2025.

[21] National Aeronautics and Space Administration (NASA). 2024. World of Change: Global Temperatures. Website: https://earthobservatory.nasa.gov/world-of-change/global-temperatures. Accessed April 17, 2025.

significantly; hence, the issue of global climate change is, by definition, a cumulative environmental impact. Therefore, this section discusses the proposed project's contribution to the cumulative GHG impact.

3.1.1 - Greenhouse Gases

Unlike emissions of criteria and toxic air pollutants, which have local or regional impacts, emissions of GHGs that contribute to global warming or global climate change have a broader, global impact. Global warming is a process whereby GHGs accumulating in the atmosphere contribute to an increase in the temperature of the earth's atmosphere. The principal GHGs contributing to global warming are CO_2, CH_4, N_2O, and fluorinated gases (Table 6). These gases allow visible and ultraviolet light from the sun to pass through the atmosphere, but they prevent heat from escaping back out into space.

GHGs have long atmospheric lifetimes, ranging from several years to several thousand years. GHGs persist in the atmosphere for a long enough time to be dispersed around the globe, cumulatively combining to cause a global climate effect.

Table 6: Description of Greenhouse Gases of Concern

Greenhouse Gas	Description and Sources and (Sinks)	Atmospheric Lifetime	Percent of US Emissions
Carbon Dioxide (CO_2)	• Fossil fuel combustion • Forest clearing • Cement production • (Plants)	50-200	79.7
Methane (CH_4)	• Livestock • Landfills • Leaks from oil and natural gas production	12	11.1
Nitrous Oxide (N_2O)	• Fertilizers • Manure • Fossil Fuel Combustion • Nylon production • Semiconductor Manufacturing • Wastewater treatment	114	6.1
Hydrofluorocarbons (HFCs)	• Automobile air conditioners • Refrigerants.	1-50,000	3.1
Perfluorocarbons (PFCs)	• Primary aluminum production • Semiconductor manufacturing	10,000-50,000	

Greenhouse Gas	Description and Sources and (Sinks)	Atmospheric Lifetime	Percent of US Emissions
Sulfur hexafluoride (SF_6)	• Electrical power transmission equipment • Magnesium industry • Semiconductor manufacturing	3,200	
Nitrogen trifluoride (NF_3)	• Electronics manufacture for semiconductors and liquid crystal displays.	740	
Source: United States Environmental Protection Agency (EPA). 2024. Overview of Greenhouse Gases.			

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the transportation, industrial/manufacturing, utility, residential, commercial, and agricultural sectors. Emissions of CO_2 are byproducts of fossil fuel combustion. Methane, a highly potent GHG is largely associated with agricultural practices and landfills. N_2O is also largely attributable to agricultural practices and soil management. CO_2 sinks, or reservoirs, include vegetation and the ocean, which absorb CO_2 through sequestration and dissolution, respectively.

Climate Impacts

Global Warming

Even if GHG emissions could be reduced to zero overnight, global temperatures will continue to rise in future years due to the buildup of GHGs that have already accumulated in the atmosphere and the oceans. As future emissions increase the atmospheric concentrations of CO_2 and other GHGs, the impacts of the warming greenhouse effect are projected to steadily worsen.

Statewide Climate Impacts

These impacts—including substantially higher temperatures, more extreme weather, increased wildfire events and sea level rise—are already being experienced in California today. As reported by the California Natural Resources Agency in 2009, despite annual variations in weather patterns, California has seen a trend of increased average temperatures, more extreme hot days, fewer cold nights, longer growing seasons, less winter snow, and earlier snowmelt and rainwater runoff. California's coastal oceans warmed by 1.26°F from 1900 to 2016, and a larger proportion of total precipitation is falling as rain instead of snow.[22] Sea level rose by as much as 7 inches along the California coast over the last century, leading to increased erosion and adding pressure to the State's infrastructure, water supplies, and natural resources. Within the past decade, California has experienced some of the most extreme climate events in its recorded history—a severe 4-year drought, a dramatic reduction in Sierra Nevada winter snowpack, five of the State's 20 largest forest fires since 1932, and 2 years back-to-back of the hottest recorded average temperatures.

[22] California Governor's Office of Land Use and Climate Innovation (LCI). 2019. California's Fourth Climate Change Assessment. California's Changing Climate 2018. January 16.

Regional Climate Impacts

The San Joaquin Valley Area, where the proposed project site is located, has experienced similar trends as the rest of California. The San Joaquin Valley annual average maximum temperatures increased by 1°F (0.6°C [degrees Celsius]) in the past 30 years.[23]

Climate change is already affecting the San Joaquin Valley's communities and agriculture. These observed trends in the Valley are expected to continue in the future:

- **Substantial increases in temperatures and more extreme hot days.** Annual average maximum temperatures are projected to increase 4°F to 5°F by midcentury, and 5°F to 8°F by the end of the century. If emissions continue to rise at high rates, projections indicate that half of the San Joaquin Valley counties will have average annual maximum temperatures over 80°F by the end of the century, which is more than an 8°F increase compared to historical conditions**.**[24]
- **More precipitation extremes, more rain and less snow.** Precipitation will likely be more intense, increasing the fraction of precipitation falling from November to March from 75 percent (current conditions) to 80 percent (by the end of the century). This translates into longer dry seasons with 20 percent less precipitation in average that may lead to increased groundwater pumping to compensate the diminished surface water supplies.[25]
- Snowpack in the Sierra Nevada has served as an essential water storage in the San Joaquin Valley, providing water during the drier season. However, snowpack is gradually decreasing at high elevations and is projected to become scant at lower elevations by the end of the century.
- As temperature increases, earlier snowmelt will shift peak flows by 2 to 4 months by the end of the century. This shift may reduce surface water storage, increasing the mismatch between when the water is available (winter spring) and when most of the water is used (summer).
- **Sea level rise.** Sea level rise increases flooding risk in Delta communities and San Joaquin County cities such as Stockton, threatening over 10,000 people. Over the past 100 years, sea level has risen 8 inches, and it could rise 2 feet by midcentury and 3.5 feet by the end of the century.
- **Increased frequency of wildfires.** Warming and greater precipitation extremes are increasing wildfires in California. Wildfires pose immediate threats to residents living in fire-prone areas,

[23] California Governor's Office of Land Use and Climate Innovation (LCI). 2022. San Joaquin Valley Region Report for California's Fourth Climate Change Assessment. Website: https://www.energy.ca.gov/sites/default/files/2022-01/CA4_CCA_SJ_Region_Eng_ada.pdf. Accessed April 21, 2025.

[24] California Governor's Office of Land Use and Climate Innovation (LCI). 2022. San Joaquin Valley Region Report for California's Fourth Climate Change Assessment. Website: https://www.energy.ca.gov/sites/default/files/2022-01/CA4_CCA_SJ_Region_Eng_ada.pdf. Accessed April 21, 2025.

[25] Ibid.

including burns and smoke inhalation, as well as secondary impacts to people further away from traveling smoke, such as asthma and respiratory irritation.[26]

- **Exacerbation of air quality problems and impacts on public health.** Extreme heat days are projected to increase for all San Joaquin Valley counties from current 4 or 5 extreme heat days per year to about 18 to 28 days toward midcentury, and about 24 to 68 days toward the end-of-century.[27] More extreme heat days correlate with higher ozone levels, leading to respiratory issues, heat-related illnesses, and increased vector-borne diseases**.**
- **Higher temperatures and impacts on Valley Fever.** Valley fever cases are more common in the San Joaquin Valley than in the rest of California, and this poorly studied illness could be exacerbated by the intensified combination of wetter conditions that allow the fungus to reproduce, and drier, windy periods that contribute to the spread of the spores from the soil into people's respiratory systems (dust storms). Current health services are insufficient, and climate change is increasing the necessity of emergency attention.[28]

While the impacts are felt locally, climate change is a global issue because GHGs are global pollutants. Pollutants with localized air quality effects, including criteria air pollutants and TACs, have relatively short atmospheric lifetimes (approximately 1 day) and generally do not travel greatly beyond their point of emission. By contrast, GHGs have long atmospheric lifetimes, ranging from several years to several thousand years. GHGs persist in the atmosphere for a long enough time to be dispersed around the globe, cumulatively combining to cause a global climate effect.

3.1.2 - GHG Emissions and Inventories

The GHGs regulated by AB 32, the California Global Warming Solutions Act of 2006, include CO_2, CH_4, N_2O, hydrofluorocarbon (HFC), perfluorocarbon (PFC), and sulfur hexafluoride (SF_6). Each GHG has its own global warming potential (GWP), which measures how much heat the gas can trap in the atmosphere compared to CO_2 over a specified time period.

GWP measures how much heat a greenhouse gas traps in the atmosphere over a specific time period, usually 100 years, compared to carbon dioxide (CO_2). This allows for comparing the impacts of different gases on global warming. According to the IPCC's Fourth Assessment Report:

- **Methane (CH_4):** GWP of 25
- **Nitrous Oxide (N_2O):** GWP of 298
- **HFCs:** GWPs range from hundreds to thousands
- **PFCs:** Very long atmospheric lifetimes, often thousands of years

[26] California Governor's Office of Land Use and Climate Innovation (LCI). 2022. San Joaquin Valley Region Report for California's Fourth Climate Change Assessment. Website: https://www.energy.ca.gov/sites/default/files/2022-01/CA4_CCA_SJ_Region_Eng_ada.pdf. Accessed April 21, 2025.

[27] Ibid.

[28] Ibid.

- **SF_6:** GWP of 23,500, the most potent greenhouse gas known

GWP factors are used to convert emissions into a common unit called carbon dioxide equivalent (CO_2e). CO_2e is calculated by multiplying the emissions of each GHG by its GWP and summing the results. Since CO_2 is the basis, its GWP is 1.

California Greenhouse Gas Emissions Inventory

California contributed GHG emissions of 371.2 million metric tons (MMT) of carbon dioxide equivalent (CO_2e) into the atmosphere in 2022.[29] Anthropogenic CO_2 is largely the byproduct of fossil fuel combustion and attributable to transportation, industry/ manufacturing, electricity generation, natural gas consumption, and agriculture processes. As shown in Figure 1, the transportation sector is the largest emitter at approximately 38 percent of GHG emissions, followed by industrial at approximately 20 percent of GHG emissions.

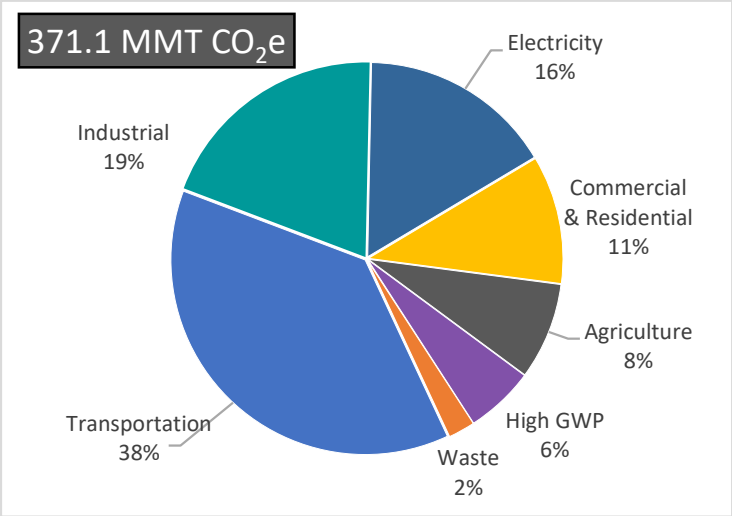

Figure 1: California GHG Emissions by Scoping Plan Sector (2022)

Source: California Air Resources Board (ARB). 2024. Current California GHG Emission Inventory Data 2000–2022.

3.2 - Greenhouse Gas Regulatory Framework

The following section describes federal, State, regional, and local regulations and policies that are relevant to GHG emissions.

[29] California Air Resources Board (ARB). 2021. Current California GHG Emission Inventory Data. Website: https://ww2.arb.ca.gov/ghg-inventory-data. Accessed April 17, 2025.

3.2.1 - Federal

The EPA is the governing body responsible for regulating air pollution in the United States and setting nationwide air quality and emissions standards. The EPA adopts and implements several regulations to reduce GHG emissions as well. These include GHG emission reduction standards for passenger cars and light-duty trucks, heavy-duty trucks (including buses), commercial aircraft and large business jets, heavy equipment (with spark-ignition engines and CI diesel engines), locomotives, marine vessels, recreational vehicles, and small equipment/tools.

California has implemented more stringent GHG emissions reduction regulations on the same sources listed above (excepting commercial aircraft and large business jets). Therefore, those regulations and their impact are discussed in greater detail below.

3.2.2 - State

California has been on the forefront of regulating GHG emissions to address climate change through a variety of far-reaching and broad GHG legislation and executive orders. The following section outlines the major legislative pieces governing climate change in the State. These major pillars of legislation are supported by numerous other legislative actions, which are detailed in the supporting measures of their scoping plans. Other regulations such as the California Building Standards Code (CBC) and Energy Standards also indirectly reduce GHG emissions.

Major Legislative Actions to Reduce GHGs

The State of California legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any state in the nation. Some legislation such as the landmark AB 32 California Global Warming Solutions Act of 2006 was specifically enacted to address GHG emissions. This was followed by a series of other executive orders, assembly bills, and senate bills that set greenhouse gas policies for the State. The current framework and future goals are supported by three major pieces of legislation.

Key Targets:

- AB 32: Reduce GHG emissions to 1990 levels by 2020.
- SB 32: Reduce GHG emissions 40 percent below 1990 levels by 2030.
- AB 1279: Achieve net-zero GHG emissions by 2045 and net-negative emissions.

To achieve these State-mandated emissions reduction targets, a document known as the Scoping Plan was required to be created by the ARB beginning in 2007 and be updated at least once every 5 years to “ensure the GHG emissions reduction activities to be adopted and implemented by the state board are complementary, nonduplicative, and can be implemented in an efficient and cost-effective manner.” The Scoping Plan outlines strategies across nearly all levels of California’s government and economy and defines—at a granular level—the regulatory actions needed to reduce GHG emissions from all economic sectors to meet the targets. While the Scoping Plan itself is not legally binding, the

regulations and measures it recommends can lead to the creation of binding rules and regulations that must be followed by various sectors and entities within the State. These regulations are enforced by the ARB and other relevant agencies to ensure compliance with California's climate goals.

2022 Scoping Plan

The 2022 Scoping Plan addresses the target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045. It lays out a plan based on bold steps to reduce GHGs to meet the anthropogenic emissions target and by expanding actions to capture and store carbon through the State's natural and working lands and using a variety of mechanical approaches. The major element of this unprecedented transformation is the aggressive reduction of fossil fuels wherever they are currently used in California, building on, and accelerating, carbon reduction programs that have been in place for a decade and a half. The plan calls for a rapid transition to zero-emission transportation; phasing out the use of fossil gas used for heating homes and buildings; development of sustainable transportation alternatives to reduce reliance on cars; and clamping down on use of chemicals and refrigerants with high GWP. The plan also identifies a path to keep California on track to meet its SB 32 GHG reduction target of at least 40 percent below 1990 emissions by 2030.

The 2022 Scoping Plan reaffirms and clarifies the role of local governments in achieving the State's climate goals, particularly as it concerns the approval of new land use development projects and their environmental review under CEQA. It encourages local governments to adopt a CEQA-qualified Climate Action Plan (CAP) addressing three priority areas: (1) transportation electrification, (2) Vehicle Miles Traveled (VMT) reduction, and (3) building decarbonization. By prioritizing climate action in these three priority areas, local governments can address the largest sources of GHGs within their jurisdiction. Local governments that prepare qualified CAPs that include strategies in these areas are contributing to alignment between local climate action and the State's climate goals.

Statewide Initiatives and Regulations

The ARB also manages the cap-and-trade program to achieve GHG emission reductions from large industrial facilities. The ARB has pioneered a range of approaches in California that have set the standard for effective air and climate programs for the nation and the world. The ARB regulations, based on extensive research and established science, have driven innovation, leading to significant technological developments such as the production of low- and zero-emission cars and trucks and cleaner fuels. As stated, ARB is tasked by the legislature with updating the Scoping Plan, which was most recently adopted in 2022 (2022 Scoping Plan), to ensure the State carries out actions to meet the 2030 and 2045 GHG emissions reduction targets.

Other State agencies responsible for regulating GHGs include:

- **California Energy Commission (CEC):** The State's energy policy and planning agency, responsible for climate change related programs including energy efficiency and leading the State to a 100 percent clean energy reality. The CEC mandates building energy efficiency

standards (in new and existing buildings) and manages the Renewable Portfolio Standard (RPS).

- **California Department of Resources Recycling and Recovery (CalRecycle):** California's recycling and waste management agency, responsible for implementation of State climate policies including landfill methane emissions reduction, waste-to-energy production, and composting requirements. CalRecycle implements food and yard waste recycling regulations, including mandates to cut organic waste disposal 75 percent by 2025**.**
- **California Governor's Office of Land Use and Climate Innovation (LCI):** The LCI (formerly known as the Governor's Office of Planning and Research [OPR]) is California's long-range planning agency, responsible for implementing CEQA review and conducting Statewide research on all climate change policies and impacts.

As a result of these actions, California reached its 2020 GHG emissions reduction target of reducing GHG emissions back to 1990 levels 4 years early and is on track to meet the 2030 GHG reduction target. Below is a summary of State regulations that are applicable to the proposed project and will serve to reduce GHG emissions now and in the future to ensure California stays on the path to meeting the State-mandated 2030 and 2045 targets:

- **Advanced Clean Cars II (ACC II)**: Designed to reach 100 percent new vehicle Zero-Emission Vehicles (ZEVs) and clean plug-in hybrid-electric vehicles (PHEVs) in California by the 2035 model year.
- **Advanced Clean Trucks**: Requires increasing percentages of manufacturer sales of on-road medium- and heavy-duty vehicles to be ZEVs to reduce emissions of criteria pollutants, TACs, and GHGs. However, as of January 2026, the EPA has taken steps to rescind the waivers granted for implementation of this regulation.
- **Small Off-road Engine (SORE) Regulations:** Transition 100 percent of small off-road spark-ignition engines (at or below 25.5 horsepower and used in non-stationary equipment), which includes landscaping equipment, to zero-emission by 2035 (where feasible).[30]
- **Zero-Emission Forklifts:** The regulation will achieve emission reductions of both criteria pollutants and greenhouse gases by requiring the phase-out of forklifts using large spark-ignition (LSI) engines, such as those running on propane and gasoline.[31] The regulation is expected to result in a significant shift of the forklift segment in California to zero-emission technology.

[30] California Air Resources Board (ARB). 2024. SORE–Small Engine Fact Sheet. Website: https://ww2.arb.ca.gov/resources/fact-sheets/sore-small-engine-fact-sheet. Accessed April 17, 2025.

[31] California Air Resources Board (ARB). 2024. Zero-Emission Forklifts. Website: https://ww2.arb.ca.gov/our-work/programs/zero-emission-forklifts. Accessed April17, 2025.

- **Low Carbon Fuel Standard:** Increase the availability and use of low carbon fuels, including renewable diesel, biodiesel, renewable and natural gas by mandating that the fuel carbon intensity in California must achieve a 20 percent reduction by 2030[32].
- **Renewable Portfolio Standard:** One of California's key programs for advancing renewable energy, it sets continuously escalating renewable energy procurement requirements for the State's load-serving entities. All entities must procure 60 percent of their electricity portfolio from renewable energy resources by 2030.
- **Building Energy Efficiency Standards–Title 24, Part 6 (Energy Code):** Contain energy and water efficiency requirements (and indoor air quality requirements) for newly constructed buildings; the requirements have gradually increased in efficiency and technology over the past decades. The current standard, known as the 2022 Energy Code, builds on California's technology innovations, and includes encouraging heat pumps, requiring electric-ready single-family homes, and solar/battery storage standards for various building types. The 2022 Energy Code also strengthens ventilation standards to improve indoor air quality.
- **California Green Building Standards Code–Title 24, Part 11 (CALGreen):** Mandatory green building standards code for the State with the goal of reducing GHG emissions from buildings.
- **Model Water Efficient Landscape Ordinance:** The Model Water Efficient Landscape Ordinance (Ordinance) was required by AB 1881 Water Conservation Act. The bill required local agencies to adopt a local landscape Ordinance at least as effective in conserving water as the Model Ordinance by January 1, 2010. Reductions in water use of 20 percent consistent with (SBX-7-7) 2020 mandate are expected under the Ordinance. New development projects that include landscaped areas of 500 square feet or more are subject to the Ordinance. The Ordinance requires measures such as: more efficient irrigation systems, incentives for graywater usage, improvements for on-site stormwater capture, and limiting high-water use plants in landscaping.

California GHG Policy and GHG Reduction Planning

Development results in a large portion of GHG emissions and the State cannot directly regulate the control of emissions from development at this level. As such, State and Local Governments are strongly urged to implement measures and plans to locally control and reduce GHG in alignment with the State's plans, by developing and adopting a local Greenhouse Gas Reduction Plan. A "qualified" reduction strategy capable of being utilized for a streamlined or tiered analysis under CEQA must meet the following requirements:

- Quantify GHG emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area.

[32] California Air Resources Board (ARB). 2024. Low Carbon Fuel Standard. Website: https://ww2.arb.ca.gov/our-work/programs/low-carbon-fuel-standard/about. Accessed April 17, 2025.

- Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable.
- Identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area.
- Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level.
- Establish a mechanism to monitor the plan's progress toward achieving the level and to require amendments if the plan is not achieving specified levels.
- Be adopted in a public process following environmental review.

A project which can show compliance with a local "qualified" GHG plan that addresses the 2030 goals of SB 32 would be consistent with its goals and can streamline its compliance determination with GHG regulations and policies. Similarly, projects that comply with "qualified" GHG reduction plans aligned with both SB 32 and AB 1279 goals would be considered consistent with all State planning goals.

Absent consistency with an adequate, geographically specific GHG reduction plan such as a CEQA-qualified CAP, the Scoping Plan outlines three distinct approaches that lead agencies may consider for evaluating the consistency of proposed plans and residential and mixed-use development projects with the State's climate goals. The approaches which may be used to evaluate whether a project may have a less than significant impact on GHG emissions include (1) assessing a project's consistency with key project attributes that have been demonstrated to reduce operational GHG emissions while advancing fair housing, (2) adopting a Net-zero Threshold of Significance, and (3) Recommended Thresholds of Significance developed by the applicable air district or other lead agencies.

These approaches are recommendations only and do not supplant lead agencies' discretion to develop their own evidence-based approaches for determining whether a project would result in a potentially significant impact on GHG emissions. The ARB notes that while a net-zero threshold may be an appropriate overall objective, it may not be feasible or appropriate metric for evaluating individual projects. For example, a net-zero target may incorrectly imply that the GHG emissions of any project that are not reduced or offset to zero would be considered potentially significant. This may lead to undue burdens and frustrate project approval processes, which may be particularly problematic for residential development in climate-smart, infill areas. A net-zero policy that prohibits or complicates projects that are needed to support the State's climate goals, like infill development or solar arrays, is ultimately not consistent with the State's goals.

3.2.3 - Regional GHG Policy and Reduction Plans

San Joaquin Valley Air Pollution Control District

The SJVAPCD has published Guidance for Valley Land-Use Agencies in Addressing GHG Emissions Impacts for New Projects (SJVAPCD Guidance). According to the SJVAPCD Guidance, the SJVAPCD takes a tiered approach for determining significance from GHG emissions as summarized below:

Tier 1 Project Exemption from CEQA.

Tier 2 Project complies with an adopted Statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

Tier 3 The project achieves the 29 percent GHG Emissions Reduction Target by using approved Best Management Practices (BMPs).

Tier 4 GHG emissions are quantified and the project implements best performance standards or achieves a GHG emissions reduction of 29 percent below Business-as-Usual (BAU).

With respect to the proposed project, the Tier 1 approach cannot be used as the proposed project is not exempt from CEQA. With respect to Tier 2, neither the State, nor the County of Kern has a qualified (CEQA verified and adopted) CAP or other plan for reducing GHG emissions. Therefore, Tier 2 cannot be used for determining significance of GHG emissions. In light of *Center for Biological Diversity v. California Department of Fish and Wildlife* (2015) 62 Cal.4th 204), the use of either Tier 3 or Tier 4 as significance thresholds also are not recommended for use in determining significance. Note that for Tier 4, BAU is a valid approach; however, the quantitative BAU reduction criteria in the SJVAPCD Guidance lacks the necessary support as specified in *Center for Biological Diversity*.

The 29 percent GHG emissions reductions in the SJVAPCD 2015 guidance are aligned with 2020 planning goals for AB 32. A BAU approach utilizing Tier 4 methods for post-2020 development projects would require updated emission GHG inventory for 2030 as well as revised reduction target that are aligned with SB 32 goals of 40 percent reduction of GHG emissions from the 1990 baseline. These inventories and thresholds have not been developed to date.

3.2.4 - Local GHG Policy and Reduction Plans

Kern County

Kern County addresses GHG most broadly in its General Plan. The County does not have a qualified GHG reduction plan or any reach codes that would address building electrification.

Metropolitan Bakersfield General Plan (Unincorporated Area)

The General Plan includes the following relevant goals and policies with respect to GHGs:

Chapter 5: Conservation/Air Quality

Goals

Goal 1 Promote air quality that is compatible with health, wellbeing, and enjoyment of life by controlling point sources and minimizing vehicular trips to reduce air pollutants.

Goal 2 Continue working toward attainment of federal, State, and local standards as enforced by the San Joaquin Valley Air Pollution Control District.

Goal 3 Reduce the amount of vehicular emissions in the planning area.

Policies

Policy 4 Consider air pollution impacts when evaluating discretionary permits for land use proposals. Considerations should include:

a. Alternative access routes to reduce traffic congestion.
b. Development phasing the match road capacities.
c. Buffers including increasing vegetation to increase emission dispersion and reduce impacts of gaseous or particulate matter on sensitive uses.

Policy 10 Implement the Transportation System Management Program (July 1984) for Metropolitan Bakersfield to improve traffic flow, reduce vehicle trips, and increase street capacity.

Policy 12 Encourage the use of mass transit, carpooling and other transportation options to reduce vehicle miles traveled.

Policy 13 Consider establishing priority parking areas for carpoolers in projects with relatively large numbers of employees to reduce vehicle miles traveled and improve air quality.

Policy 14 Establish park and ride facilities to encourage carpooling and the use of mass transit.

Policy 15 Promote the use of bicycles by providing attractive bicycle paths and requiring provision of storage facilities in commercial and industrial projects.

Policy 18 Encourage walking for short distance trips through the creation of pedestrian friendly sidewalks and street crossings.

Policy 19 Promote a pattern of land uses which locates residential uses in close proximity to employment and commercial services to minimize vehicular travel.

Policy 22 Require the provision of secure, convenient bike storage racks at shopping centers, office buildings, and other places of employment in the Bakersfield Metropolitan area.

Policy 23 Encourage the provision of shower and locker facilities by employers, for employees who bicycle or jog to work.

Policy 25 Require design of parking structures and ramps to provide adequate off- street storage for entering vehicles to minimize on-street congestion and avoid internal backup and idling of vehicles.

Policy 29 Encourage the use of alternative fuel and low or zero-emission vehicles.

Implementation Measures

Measure 1 Amend as needed the City and County Zoning Ordinances to:

a. Incorporate the provisions of the Air Quality Management Plan.
b. Incorporate measures identified under the Transportation System Management Plan for Metropolitan Bakersfield.
c. Limit intrusions into the pedestrian right-of-way.
d. Require air quality design considerations indicated in policies 22 and 25.

Measure 5 Expand the use of alternative fuel and low or zero-emission vehicles in the metropolitan area for public and private use to achieve 10 percent usage.

Measure 6 Create the private and public infrastructure necessary to support alternative fuel vehicles.

4 - ENERGY

4.1 - Environmental Setting

This section describes the existing energy setting in the proposed project area as well as the relevant regulatory framework. The "Environmental Setting" provides a description of energy use and resources. The "Regulatory Framework" provides a description of relevant federal, State and local regulatory policies that serve to reduce energy use and consumption of energy resources and are applicable to the proposed project.

4.1.1 - Existing Setting

The existing setting focuses on Kern County-level energy consumption and factors related to the use and availability of traditional fossil fuel and alternative, renewable energy sources.

Energy Usage Sectors

Energy use in an area is distributed across several sectors: industrial, residential and commercial energy and transportation.

- **Transportation Sector:** This is a significant consumer of energy, primarily in the form of gasoline and diesel for vehicles.
- **Industrial sector:** The industrial sector includes consumption from construction, in addition to manufacturing, agriculture and mining.
- **Residential and commercial sectors:** The residential sector covers energy used in homes, businesses, offices, stores, and other commercial establishments for heating, cooling, lighting, and appliances.

Transportation Sector

Estimated sales of transportation fuels in the State were 13,576 million gallons of gasoline and 2,316 gallons of diesel. Kern County sold an estimated 401 million gallons of gasoline and 238 million gallons of diesel in 2023.[33]

A variety of alternative fuels are used to reduce petroleum-based fuel demand. The use of these fuels is encouraged through various Statewide regulations and plans, such as the Low Carbon Fuel Standard (LCFS) and SB 32. Conventional gasoline and diesel may be replaced, depending on the capability of the vehicle, with transportation fuels including hydrogen, biodiesel, and electricity. In

[33] California Energy Commission (CEC). 2024. 2023 Annual Retail Fuel Outlet Report Results CEC-A15 Results and Analysis, Website: https://www.energy.ca.gov/media/3874, Accessed April 17, 2025.

2023, the State had 597 renewable diesel refueling stations, 57 private hydrogen stations and seven retail hydrogen stations.[34]

Electricity can be used to power electric and plug-in hybrid vehicles directly from the power grid. Electricity used to power vehicles is generally provided by the electricity grid and stored in the vehicles' batteries. Fuel cells are being explored to use electricity generated onboard the vehicle to power electric motors. As of August 2024, California had a reported 153,034 public and shared private electric vehicle (EV) chargers; Kern County had a reported 1,444 chargers. This includes 523 Public DC fast chargers, 617 Public Level 2 and 2 Shared Private DC fast chargers, and 302 Shared Private Level 2 chargers.[35]

Construction Sector

While estimates of construction fuel are not available as a subcategory of industrial usage, construction fuel is known to be a significant contributor to industrial fuel consumption. The construction industry is a major user of diesel fuel as it is utilized almost exclusively in off-road construction equipment. Diesel is the fuel of choice because it has 12 percent more energy per gallon than gasoline and has fuel properties that prolong engine life, making it ideal for heavy-duty vehicle applications. Biodiesel was introduced into California in 2000 and Renewable Diesel in 2012. Biodiesel is predominantly made from soybean and recycled oils into a unique diesel fuel (it can be blended into transportation fuels but is not a substitute for diesel fuel). Renewable Diesel is predominantly made from animal waste oils and the finished fuel is nearly identical to petroleum-based diesel.[36] The chemical and structural properties of renewable diesel are similar to petroleum-derived (conventional) diesel and can be used as a direct substitute for conventional diesel (up to 100 percent or R100). Blends of renewable diesel and conventional diesel are labeled with an R followed by the percentage (by volume) of the renewable diesel content. [37]

California consumed over 62 million barrels of renewable diesel in 2023,[38] compared to 1 million barrels in 2011 and 28 million barrels in 2021. This is largely a result of the LCFS which went into

[34] United States Department of Energy (DOE). 2024. Alternative Fueling Station Counts by State. Website: https://afdc.energy.gov/stations/states. Accessed April 17, 2025.

[35] California Energy Commission (CEC). 2024. Electric Vehicle Chargers in California. Website: https://www.energy.ca.gov/data-reports/energy-almanac/zero-emission-vehicle-and-infrastructure-statistics-collection/electric. Accessed April 17, 2025.

[36] California Energy Commission (CEC). 2024. Diesel Fuel Data, Facts, and Statistics, Website: https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/diesel-fuel-data-facts-and-statistics. Accessed April 17, 2025.

[37] California Air Resources Board (ARB). 2024. Fact Sheet: Renewable Diesel Fuel Requirements, Website: https://ww2.arb.ca.gov/resources/fact-sheets/fact-sheet-renewable-diesel-fuel-requirements. Accessed April 17, 2025.

[38] United States Energy Information Administration (EIA). 2024. State Profiles and Energy Estimates, Website: https://www.eia.gov/state/seds/sep_fuel/html/pdf/fuel_use_rd.pdf. Accessed April 17, 2025.

effect in 2011.[39] This represents a significant shift away from traditional diesel with clean fuels replacing over 50 percent of the diesel used in the State in the first quarter of 2023.[40]

Residential and Commercial Sector

Electricity and natural gas are distributed through the various electric load-serving entities (LSEs) in California. These entities include investor-owned utilities (IOUs), publicly owned utilities (POUs), rural electric cooperatives, community choice aggregators, and electric service providers. These providers are often subject to State-level regulations and standards, including RPS.

The RPS consists of policies (applicable to the energy /utility provider) designed to increase the use of renewable energy sources for electricity generation. California's RPS, established by SB 350 and subsequently SB 100, require 60 percent of electricity to come from renewable sources by 2030 and 100 percent from zero-carbon sources by 2045.

The renewable content of the produced electricity is based on the energy mix, or the combination of different energy sources used to meet energy needs in a particular region. It includes both renewable and nonrenewable sources. For example, a typical energy mix might include coal, natural gas, nuclear, hydroelectric, wind, and solar power.

Under the Power Source Disclosure Program, retail electricity providers are required to annually disclose to their retail consumers the mix of sources used to provide electricity service during the previous calendar year. In those instances where a retail supplier offers consumers more than one electricity portfolio, the retail supplier is to provide information specific to each electricity portfolio offered. This information is provided to consumers in the form of Power Content Labels.[41]

The proposed project would be served by Pacific Gas and Electric Company (PG&E). PG&E is an investor-owned utility and load-serving entity. Its service area covers a large portion of the State stretching from Eureka in the north to Bakersfield in the south, and from the Pacific Ocean in the west to the Sierra Nevada in the east.

PG&E is both a utility and a load-serving entity for the project. PG&E, in its utility capacity, owns and operate the transmission lines, distribution lines, transformers, and utility poles that make up the grid.

[39] United States Energy Information Administration (EIA). 2023. Almost all U.S. renewable diesel is consumed in California; most is not made there. Website: https://www.eia.gov/todayinenergy/detail.php?id=57180#, July 20. Accessed April 17, 2025.

[40] California Air Resources Board (ARB). 2023. Press Release 23-24: Low Carbon Fuel Standard drives shift away from petroleum. Website: https://ww2.arb.ca.gov/news/first-time-50-california-diesel-fuel-replaced-clean-fuels. August 23. Accessed April 17, 2025.

[41] California Energy Commission (CEC).2022. Power Content Labels. Website: https://www.energy.ca.gov/programs-and-topics/programs/power-source-disclosure-program/power-content-label. Accessed February 22, 2025.

Electricity

California's 2022 electricity consumption was 287,220 gigawatt-hours (GWh) or 287 terawatt-hours (TWh). Kern County's 2022 commercial and residential sectors utilized a total of 14,861 Million of kWh (GWh) divided into nonresidential usage of 120,096 GWh and residential usage of 2765 GWh.[42]

Natural Gas

In 2022, Kern County's natural gas usage was 1,774 total millions of therms (1,674 million therms for nonresidential usage and 99 million therms for residential).[43]

PG&E supplies natural gas in Kern County. The site is currently served by natural gas via pipeline. The proposed project will not utilize natural gas or have natural gas lines to the buildings.

4.2 - Regulatory Framework

The following section describes federal, State, regional, and local regulations and policies that are relevant to GHG emissions. Energy consumption focuses on traditional fossil fuels as well as replacement with renewable sources and overlaps considerably with regulations and policies designed to reduce GHG emissions. This section focuses primarily on energy regulations and policies, with references to GHG and air quality regulations that also reduce energy consumption.

4.2.1 - Federal

Federal energy regulations were first introduced in 1975 with the energy Policy and Conservation Act of 1975 in response to the 1973–1974 Arab Oil Embargo to improve the average fuel economy of cars and light trucks in the US. Other subsequent federal rules included the Energy Policy Act of 2005 (which introduced numerous energy efficiency standards for appliances, building off the existing Energy Star Program) and The Energy Independence and Security Act (EISA) of 2007 (which strengthened the vehicular fuel economy standards).

These regulations set important groundwork and foundation for subsequently promulgated California regulations.

4.2.2 - State

Because federal regulations generally preempt State and local regulations, they set the foundation for subsequent State regulations to build upon. The following addresses State regulations related to transportation fuel efficiency, and regulations related to commercial and residential energy usage related to building envelope and appliance usage.

[42] California Energy Commission (CEC). 2024. Energy Consumption Database, Electricity Consumption by County. Website: https://ecdms.energy.ca.gov/elecbycounty.aspx. Accessed February 22, 2025.

[43] California Energy Commission (CEC). 2024. Energy Consumption Database, Gas Consumption by County. Website: https://ecdms.energy.ca.gov/gasbycounty.aspx. Accessed February 22, 2025.

Transportation Sector

California adheres to the federal Corporate Average Fuel Economy (CAFE) standards, but also has several other State programs that influence emissions and fuel efficiency. These regulations include the following:

- Pavley Regulations and Fuel Efficiency Standards (AB 1493)
- Low Emission Standards (LEV Program)
- Zero-Emission Vehicle (ZEV Program)
- Advanced Clean Cars Program
- CA Phase 2 GHG Trailer Certification
- Truck and Bus Regulations
- Heavy-duty Diesel GHG Certification Program
- Heavy-duty Inspection and Maintenance (I&M) Regulation
- Clean Miles Standard

These GHG or air quality regulations aim to reduce emissions of criteria pollutants, air toxics, and greenhouse gases, resulting in decreased energy consumption. However, they are not energy regulations or policies per se. While these regulations increase energy efficiency and consumption from vehicles, they typically apply to vehicle/engine manufacturers or vehicle maintenance and operation rather than directly to land use developers. Developers can influence on-site operational factors that affect energy consumption by enforcing air quality regulations and measures that influence emissions from vehicles, such as limits on idling of commercial motor vehicles and construction equipment.

The California Code of Regulations Title 13, Section 2485, Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling, prohibits diesel-fueled commercial vehicles from idling for more than 5 minutes at any given location. Compliance with this measure results in energy savings through reduced fuel consumption from unnecessary idling.

The Sustainable Communities and Climate Protection Act of 2008 (SB 375) requires land use projects to meet target reductions of VMT to reduce greenhouse emissions. Because VMT is directly related to fuel consumption, this regulation also serves to reduce energy consumption related to passenger vehicle travel.

Construction Sector

Land use development projects consume fuel during construction operations. Because of energy and efficiency requirements, off-road diesel equipment dominates the industry. Provisions in California's In-Use Off-Road Diesel Fleets regulation under California Code of Regulations Title 13 not only provide protection from air pollution, but also promote the use of newer, well-tuned, and maintained equipment, and provide regulatory limits on unnecessary idling. These measures minimize toxic diesel exhaust and result in energy efficiency and avoidance of wasteful energy use.

Residential and Commercial Sector (Buildings and Appliance Energy)

California Code of Regulations Title 24

Part 6 (Energy Efficiency Standards for Residential and Nonresidential Buildings)

California Code of Regulations Title 24 Part 6 (California's Energy Efficiency Standards for Residential and Nonresidential Buildings) was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy-efficient technologies and methods. Energy-efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The 2022 Building Energy Efficiency Standards went into effect on January 1, 2023.

This update to the building code provides crucial steps in the State's progress toward 100 percent clean carbon neutrality by midcentury. The 2022 Energy Code builds on California's technology innovations, encouraging energy-efficient approaches to encourage building decarbonization, emphasizing in particular heat pumps for space heating and water heating. This set of Energy Codes extends the benefits of photovoltaic and battery storage systems and other demand flexible technology to work in combinations with heat pumps to enable California buildings to be responsive to climate change. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Energy Code. The Energy Code includes measures that will reduce energy use in single-family, multi-family, and nonresidential buildings. These measures will:

- Affect newly constructed buildings by adding new prescriptive and performance standards for electric heat pumps for space conditioning and water heating, as appropriate for the various climate zones in California.
- Require photovoltaic (PV) and battery storage systems for newly constructed multi-family and selected nonresidential buildings.
- Electric-readiness is a new mandatory requirement for dwelling unit gas space heating, water heating, cooking, and laundry. Common use areas are exempt from the electric-ready requirement, with the exception of common use area clothes dryers.
- Update efficiency measures for lighting, building envelope, heating, ventilation, and air conditioning (HVAC); and
- Make improvements to reduce the energy loads of certain equipment covered by (i.e., subject to the requirements of) the Energy Code that perform a commercial process that is not related to the occupant needs in the building (such as refrigeration equipment in refrigerated warehouses, or air conditioning for computer equipment in data processing centers).

California Code of Regulations Title 20 (Appliance Efficiency Regulations)

Sets standards for the energy efficiency of appliances sold or offered for sale in California, covering a wide range of appliances. Title 20 ensures that individual appliances meet specific energy efficiency standards, complementing Title 24's focus on overall building energy efficiency.

California Code of Regulations Title 24 Part 11 (California Green Building Standards Code)

California Code of Regulations Title 24, Part 11 (commonly referred to as the CALGreen Code) provides for voluntary energy efficiency provisions designed to support local jurisdictions and other entities aiming to exceed the mandatory energy efficiency requirements set by the Energy Code. These provisions apply to newly constructed buildings as well as additions and alterations to existing buildings. These voluntary measures focus on enhancing resource efficiency, improving building energy system performance, and aligning with broader environmental and public health goals, such as decarbonizing California's economy. They complement the mandatory provisions by offering additional strategies for energy conservation and efficiency.

Renewable Portfolio Standard

Established by SB 350 and SB 100, the RPS mandates that 60 percent of California's electricity come from renewable sources by 2030 and 100 percent from zero-carbon sources by 2045. Developers can support this by integrating renewable energy systems, such as solar panels, into their projects. This not only helps meet State energy goals but also enhances the sustainability and marketability of new developments.

California Energy Commission 2023 Integrated Energy Policy Report

The Integrated Energy Policy Report (IEPR) is prepared by the CEC biennially (every two years), as mandated by SB 1389. This report provides a comprehensive overview of the State's major energy trends and issues, covering sectors like electricity, natural gas, and transportation fuels. The 2023 report highlights the implementation of California's innovative policies and the role they have played in establishing a clean energy economy, as well as provides more detail on several key energy policies, including decarbonizing buildings, increasing energy efficiency savings, and integrating more renewable energy into the electricity system.

4.2.3 - Regional

The SJVAPCD has undertaken several initiatives and efforts to address GHG emissions and simultaneously promote energy efficiency, and expansion of the region's EV charging infrastructure.

1. ***Employer Trip Reduction Rule (SJVAPCD Rule 9410)***–EV Charging Stations: Employers can include the installation of EV charging stations as part of their compliance with the Employer Trip Reduction Rule (Rule 9410). This rule aims to reduce VMT by employees commuting to and from work, thereby reducing emissions of oxides of nitrogen (NOx), VOC, and particulate matter (PM). Providing EV charging stations encourages employees to use electric vehicles, contributing to overall emission reductions.
2. ***Valley Takes Charge! Project–***Streamlining EV Charging Station Permitting: The Valley Takes Charge! project, funded by the CEC and administered by the SJVAPCD, addresses barriers to the deployment of EV infrastructure in the San Joaquin Valley. The project

includes efforts to streamline the permitting and installation processes for EV charging stations, making it easier for businesses and communities to adopt EV infrastructure. [44]

3. ***Charge Up! Program***–Incentives for EV Chargers: The Charge Up! Program provides financial incentives for the purchase and installation of new Level 2 and Level 3 EV chargers. This program aims to promote clean air alternative fuel technologies and the use of low- or ZEVs.
4. **Clean Vehicle Fueling Infrastructure Program**–This program provides incentives for the installation of new stations, conversion of existing stations, and expansion of existing stations for hydrogen fueling and electric battery charging of heavy-duty vehicles. This program supports the development and implementation of fueling infrastructure within the district.

[44] California Energy Commission (CEC). Final Project Report. Valley Takes Charge! Zero-Emission Vehicle Awareness Programs in the San Joaquin Valley. Website: https://www.energy.ca.gov/sites/default/files/2021-05/CEC-600-2019-074.pdf. Accessed April 22, 2025.

5 - METHODOLOGY

This section describes the methodologies used in the impact analyses relating to air quality and greenhouse gas emissions for the proposed project. The methodologies follow the guidance and recommendation of Kern County, SJVAPCD, ARB, EPA, and OEHHA.

5.1 - Model Selection, Modeling Parameters and Assumptions

The analysis presented in this section is based on quantitative and qualitative approaches for determining air quality impacts related to construction and operation of the proposed project. The air quality impact assessment was prepared pursuant to the Kern County Planning Department's Guidelines for Preparing an Air Quality Assessment for Use in Environmental Impact *Reports* and SJVAPCD's 2015 GAMAQI. The GAMAQI identifies thresholds of significance for criteria pollution emissions.

The California Emission Estimator Model (CalEEMod) is used to calculate and assess criteria air pollutant (including ozone precursors), TACs, and GHG emissions, which consist of those on-site and off-site construction and operational emissions generated from all facets of the proposed project. CalEEMod provides a uniform platform for government agencies, land use planners, and environmental professionals to emissions from land use development and linear projects in California. The model also incorporates the update made by California Air Pollution Control Officers Association (CAPCOA) in October 2024, when it released the Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity, an expanded and updated resource with updated data and new measures to quantify GHG emission reductions; methods to identify and score future potential climate hazards; measures to quantify reduced vulnerability to climate change; and measures to improve health and equity.

CalEEMod provides default values for estimating construction and operational emissions; use of the defaults is described below. If modifications were made to the analysis, that is also described below. The CalEEMod output includes notes as well as references to additional calculations included in Appendix A.

Construction and operational emissions reported in this analysis were modeled using CalEEMod Version 2022.1 for comparison and analysis to thresholds as provided for in SJVAPCD's GAMAQI.

5.2 - Air Pollutants and GHGs Assessed

5.2.1 - Criteria Pollutants Assessed

The following air pollutants are assessed in this analysis:

- ROG
- NO_X
- CO
- PM_{10}
- $PM_{2.5}$

Note: The proposed project would emit ozone precursors (ROG and NO_X). However, the proposed project would not directly emit ozone, as it is formed in the atmosphere during the photochemical reaction of these precursors.

Modeling accounts for the implementation of SJVAPCD Rule 8011 of Regulation VIII to control fugitive dust emissions. The modeling also assumes that the Construction Equipment would meet Clean Fleet requirements to meet the project's ISR Commitment under Rule 9201. Other emission reductions from mitigation measures not modeled are shown separately.

5.2.2 - Toxic Air Contaminants Assessed

The following TACs are assessed in this analysis:

- DPM

5.2.3 - Greenhouse Gases Assessed

This analysis is restricted to the most commonly-emitted GHGs by land use developments and linear construction projects, which are quantified by CalEEMod, and include CO_2, CH_4, N_2O, and HFCs (including refrigerants).

PFCs may be generated by certain industrial and manufacturing processes, which are not part of the proposed project and are not currently quantified by CalEEMod. Likewise, CalEEMod does not quantify SF_6, which is a human-made chemical commonly used as an electrical insulating fluid for power distribution equipment.[45]

[45] California Air Pollution Control Officers Association (CAPCOA). 2022. California Emission Estimator Model (CalEEMod) Users Guide – Version 2022.1. April.

5.3 - Model Inputs

5.3.1 - Construction Emissions

Construction activities associated with the proposed project would result in emissions of criteria air pollutants and GHGs. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and prevailing weather conditions, and result from on-site and off-site activities. On-site emissions principally consist of exhaust emissions from the activity of light and heavy-duty construction equipment, motor vehicle operation, and fugitive dust (PM_{10} and $PM_{2.5}$) from disturbed soil. Additionally, paving operations and application of architectural coatings would release VOC emissions. Off-site emissions are caused by motor vehicle exhaust from delivery vehicles, worker traffic, and road dust (PM_{10} and $PM_{2.5}$).

Construction Schedule

As stated above, the construction schedule was assumed to last approximately 27–29 months with construction occurring in overlapping phases. The precise duration and dates of initiation and commencement would vary depending on whether the construction dates are at the start or end of the anticipated month. Should the construction schedule occur in later years or months, construction emissions would be expected to decrease because of mandatory compliance with improvements in technology and more stringent regulatory requirements that would affect future construction equipment and fuels. Should the construction schedule take longer to complete than what was assumed, the average daily emissions would be lower than what is calculated for purposes of this analysis. For purposes of modeling, construction was estimated to begin in December 2025 and end in May 2028. The construction of the individual buildings will be phased over this period as shown in Figure 2.

- Retail Buildings (December 2025–September 2026)
- Roadway and Frontage Improvements (March 2026–September 2027)
- Building 4 (March 2026–September 2027)
- Buildings 1 and 2 (July 2026–September 2027)
- Building 3 (March 2027–May 2028)

The project is expected to become fully operational in 2028.

The overall construction schedule for all buildings and off-site improvements, as modeled in CalEEMod, are shown in the Conceptual Schedule shown in Figure 2. The schedule will occur in phases, with building construction occurring in multiple areas concurrently. Maximum activity levels will take place in July and August 2027.

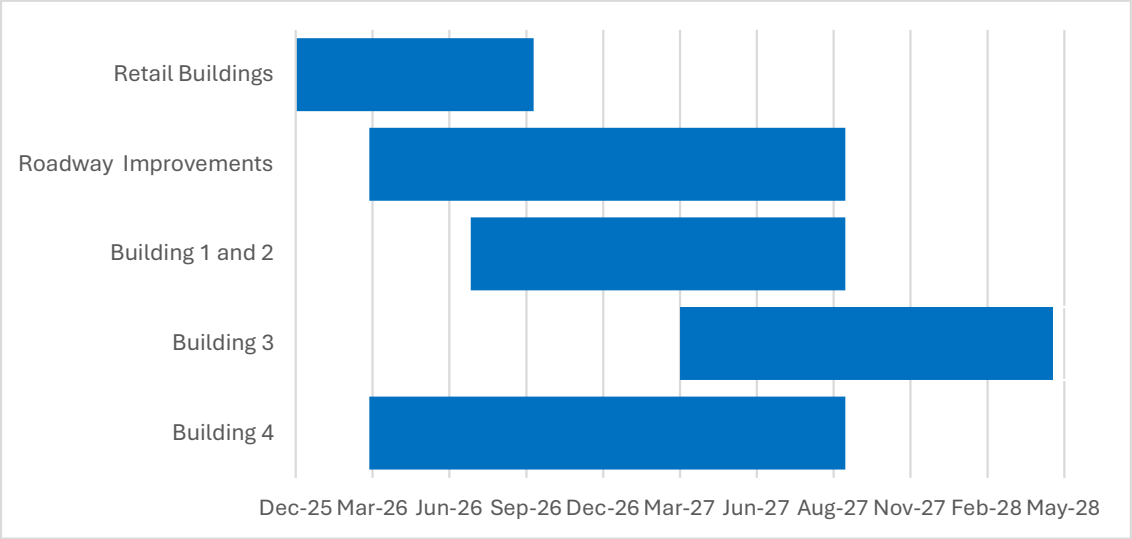

Figure 2: Proposed Project Construction Phasing

Construction activities for each phase (e.g., retail, Building 1 and 2, etc.) would consist of site preparation, grading, building construction, paving, and architectural coating of the inside and outside of the buildings. Off-site improvements would be limited to roadway and utility improvements and would not include building construction or architectural coating phases. Each phase was modeled using CalEEMod defaults based on the acreage being developed, the respective building size and footprint, and the acres of roadway/parking. The modeled days of activity per building phase are summarized in Table 7.

Table 7: Modeled Days of Activity for Each Building Phase

Phase	Site Preparation	Grading	Building Construction	Paving	Architect Coating	Trenching
Retail	3	6	200	10	10	—
Building 1 and 2	20	45	230	20	20	—
Building 3	10	30	230	20	18	—
Building 4	40	90	225	55	20	—
Roadway and Frontage Improvements	10	30	—	20	—	350

Source: Appendix A.

The modeled construction schedule, worker commute trips, vendor and haul truck trips, and construction equipment, along with hours of operation per day, horsepower (hp), and load factor for construction are available in Appendix A.

Construction Equipment

The on-site and off-road construction equipment assigned to each phase by CalEEMod varies according to the project size and the construction activity (also referred to as phase). The type of construction equipment and usage assumptions utilized to estimate emissions is presented in Table 8. Additional details are included in Appendix A.

Table 8: Project Construction Assumptions

Construction Activity	Equipment Types	Equipment Average Hours per Day	Average Days per Week
Site Preparation	Rubber Tired Dozers Tractors/Loaders/Backhoes Graders Scrapers	8	5
Grading	Graders Excavators Tractors/Loaders/Backhoes Scrapers Rubber Tired Dozers	8	5
Building Construction	Forklifts Generator Sets Cranes Welders Tractors/Loaders/Backhoes	7–8	5
Roadway and Frontage Improvements	Excavators Skid Steer Loaders Tractors/Loaders/Backhoes Trenchers Rollers Plate Compactors Pumps	1	5
Paving	Pavers Paving Equipment Rollers Tractors/Loaders/Backhoes Cement and Mortar Mixers	8	5
Architectural Coating	Air Compressors	6	5
Notes: Equipment list is a composite of equipment for all California Emissions Estimator Model (CalEEMod) runs. The type and amount of each equipment assigned by CalEEMod depends on the construction site size defined in the modeling. For			

Construction Activity	Equipment Types	Equipment Average Hours per Day	Average Days per Week
example, cement and mortar mixers are assigned to small construction sites, such as those modeled for retail but not for larger sites such as Building 4.			
Trenching is a general phase added to CalEEMod and is used to characterize the roadway and frontage improvement construction phase accounting for the intermittent use of equipment required for roadway installation, pipeline/utility installation, landscaping, road and sidewalk construction. It includes a range of equipment such as trenchers, skid steer loaders, excavators, and rollers.			
Source: Appendix A.			

This analysis uses the CalEEMod default hp and load factors for off-road equipment. Off-road equipment is modeled using the "Average" option, which uses Statewide average fleetwide emission factors from ARB's OFFROAD2017 model for the project construction year.[46]

Construction Activities

Site Preparation and Grading

During site preparation and grading/excavation activities, fugitive dust can be generated from the movement of soil on the project site. CalEEMod estimates dust from earth movement, from graders or other construction equipment leveling the land and from loading or unloading soil into haul trucks. Each activity is calculated differently in CalEEMod, based on the number of acres traversed by the grading equipment.

During grading activities, fugitive dust can be generated from the movement of dirt on the project site. CalEEMod estimates dust from bulldozers moving dirt around, dust from graders or scrapers leveling the land, and loading or unloading dirt into haul trucks. Every project within the SJVAPCD's jurisdiction is required to comply with the requirements of the SJVAPCD's Rules under Regulation VIII (Fugitive PM_{10} Prohibitions). Rule 8011 requires actions to prevent, reduce, or mitigate anthropogenic fugitive dust emissions during fugitive dust generating activities.

Building Construction

During building construction activities, on-site emissions are primarily from the off-road construction equipment and calculated using the equipment specified along with the ARB Off-Road Emission and Load Factors, the number of construction days and hours of operation per day.

Architectural Coating and Paving

ROG emissions are calculated using CalEEMod defaults and 100 g/L for parking lot paint used for striping and other markings. The surface area to be coated is based on CalEEMod correlations for

[46] California Air Pollution Control Officers Association (CAPCOA). 2022. California Emission Estimator Model (CalEEMod): Appendix C Emission Calculation Details for CalEEMod. April.

interior and exterior walls with the interior walls representing 75 percent of the Coating Emissions and the exterior walls representing 25 percent. These assumptions are particularly conservative for warehouses that have few interior walls.

The proposed project was estimated to have approximately 59 acres of paved areas based on site plans.

Off-Site Construction Vehicles

A summary of the maximum construction-related vehicle trips for each construction phase is available in Appendix A. Note that the total number of construction vehicle trips would not necessarily occur on the same day because construction activities would vary each day during the construction period. The number of construction-related vehicle trips will vary from phase-to-phase for each building. Additionally, construction of multiple buildings and frontage improvements will occur concurrently. Appendix A includes the maximum number of construction trips for each phase by vendor, worker and haul across all construction activities. Haul trips are zero because the site is expected to balance overall with no significant import or export of soil. Asphalt trips during paving for each phase are accounted for in the vendor trips.

The maximum construction trips (estimated at 897 one-way trips: 650 worker trips and 247 vendor trips) during the proposed project's construction would occur in July 2027, corresponding to the concurrent building construction of all warehouse building areas combined with the trenching phase from the ongoing roadway and frontage improvements.

Mitigation Measures for Construction

Emissions modeling was performed for an unmitigated case only, based on Statewide average emission factors which represent off-road fleets that become increasingly cleaner each year as a result of the In-use Off-Road ATCM.

5.3.2 - Operational Emissions

Operational activities associated with the proposed project would result in emissions of criteria pollutants and GHGs. Operational emissions are expected to occur from the following sources:

- Area Sources
- Energy Sources
- Mobile Sources
- Stationary Sources (including emergency diesel generators)
- On-site Cargo Handling Equipment
- TRUs
- Refrigerants (GHG only)

CalEEMod contains calculations to estimate both direct emissions of criteria air pollutants and GHG emissions at the proposed project site and indirect GHG emissions occurring elsewhere. Indirect emissions are emissions where the location of the consumption or activity is different from where actual emissions are generated. For example, electricity would be consumed at the proposed project site; however, emissions associated with producing that electricity are generated off-site at a power plant.

Area Sources

Architectural Coatings

Area source emissions include occasional architectural coating activities for repainting of buildings associated with the proposed project. These activities produce emissions resulting from the evaporation of solvents contained in paints, varnishes, primers, and other surface coatings. CalEEMod assumes that repainting occurs at a rate of 10 percent of the buildings per year.

Consumer Products

Other area source emissions include consumer products such as (but not limited to) detergents, cleaning compounds, polishes, personal care products, and lawn and garden products. Many of these products contain organic compounds when released in the atmosphere and can react to form ozone and other photochemically reactive pollutants. The emissions associated with these consumer products were calculated based on CalEEMod defaults.

Landscape Maintenance Equipment

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, grinders, trimmers, and chain saws used to maintain the landscaping of the proposed project. As stated under the Regulatory Framework, AB 1346 aims to ban the sale of new gasoline powered equipment under 25 gross hp (known as SOREs) by 2024. For purposes of this analysis, landscape maintenance equipment were calculated based on default assumptions in CalEEMod.

Energy

Default electricity and natural gas consumption within CalEEMod are based on land use and climate zone and utilize 2019 consumption estimates using the CEC's 2018–2030 Uncalibrated Commercial Sector Forecast and 2019 Residential Appliance Saturation Survey. Building electricity and natural gas use is divided into end uses subject to Title 24 standards, and those not subject to Title 24 standards (Title 24 and Non-Title 24).

Electricity subject to Title 24 includes space heating, cooling, ventilation, water heating, outdoor lighting, and the majority of indoor lighting, while electricity ***not*** subject to Title 24: all other end uses. Non-Title 24 electric end uses include cooking appliances, clothes washers, electric dryers, refrigeration, office electronics, electric pool/spa heating, well pumping, fans, miscellaneous plug-in uses, and the remainder of indoor lighting.

Natural gas subject to Title 24 includes space heating and water heating while natural gas ***not*** subject to Title 24 includes all other end uses. Examples of Non-Title 24 end uses are range/ovens, dryers, pool/spa heating, and other miscellaneous uses. Emissions from this sector are principally from use of space and water heating. As previously stated, the proposed project will be all-electric by design and there will be no emissions from combustion of natural gas for building energy.

Electricity (GHG Only)

GHG emissions modeling includes those indirect emissions from electricity consumption based on CalEEMod defaults for energy usage based on land use type and the 2019 Title 24 Building Standards. The energy consumption in megawatt-hour (MWh)-year is used in conjunction with the Energy Intensity of the purchased electricity to calculate the GHG emissions in CO_2e using the model default rate of CO_2 per megawatt of electricity produced, which is based on the local utility provider's default emissions rate in CalEEMod.

Water and Waste (GHG Only)

CalEEMod includes calculations for indirect GHG emissions for electricity consumption, water consumption, and solid waste disposal. For water consumption, the model calculates embedded energy (e.g., treatment, conveyance, distribution) associated with providing each gallon of potable water to the project site. For solid waste disposal, GHG emissions are generated as solid waste generated by the proposed project decomposes in a landfill. CalEEMod defaults are assumed for the project.

Mobile Sources

Motor vehicle emissions refer to exhaust and road dust emissions from the motor vehicles that would travel to and from and within the project site. The proposed project's operational-related air quality emissions from vehicle trips would be those generated by employee trips to and from the site, customer trips generated by the retail components, and truck trips associated with the industrial uses. The following describes the methods utilized to determine the trip generation, the on-site and off-site distances traveled by vehicle type, the fleet mix, and the emission rates associated with each category of vehicle in the fleet mix.

Table 9: Proposed Project Trip Generation

Building #	ITE Code	Development Type	Size (1,000 square feet)	Daily Trips		
				Cars	Trucks	Total
1	150a and 150b	Warehousing	257.58	298	147	445
2	140a and 140 b	Manufacturing	192.78	842	87	929
3	140a and 140b	Manufacturing	180.36	801	81	882
4	150a and 150b	Warehousing (Dry Storage)	437.36	486	244	730

Building #	ITE Code	Development Type	Size (1,000 square feet)	Daily Trips		
				Cars	Trucks	Total
4	157a and 157b	Warehousing (Cold Storage)	437.36	555	265	820
5 and 6	934	Fast Food Restaurant–Drive-through	9.41	4399	—	4399
Subtotal (with Quick Serve Trips Unadjusted)				7381	824	8205
Fast Food Capture			5% of trips	(220)	—	(220)
Fast Food Pass-By			25% of trips	(1100)	—	(1100)
Fast Food Restaurant–Drive-through (Adjusted)				3079	—	3079
Sub Total Buildings 1–4 Warehouse				2982	824	3806
Total Adjusted				**6061**	**824**	**6885**

Notes:
The trip generation from the Fast Food Restaurant has been adjusted to reflect changes to the site plan.

Traffic Study, Warehousing, Manufacturing, and Commercial Development, Northwest Corner or Merle Haggard Drive & Airport Drive by Ruettgers & Schuler Civil Engineers, February 2025.

The trip generation associated with truck and car trips was provided by Ruettgers & Schuler from email correspondence with John Schuler of Ruettgers & Schuler Civil Engineers dated March 12, 2025.

Passenger Vehicles

To determine regional emissions from passenger car vehicles, the proposed project's mobile sources were assessed according to the trip generation rates from the traffic study prepared by Ruettgers & Schuler Civil Engineers, February 2025, "*Warehousing, Manufacturing, and Commercial Development, Northwest Corner of Merle Haggard Drive & Airport Drive*."[47] Emissions were calculated using the trip rates from the traffic study combined with trip distances and vehicle emission factors. Emission factors were derived from Emission Factors mobile source emissions model (EMFAC2021) v.1.0.2 ONROAD model for Kern County for operational year 2028. Employee vehicle distributions were derived from the traffic study, and it was assumed that facility operations occur 24 hours per day. Assumptions include:

- **On-site passenger vehicle travel (round trip)**: distances derived from the site plan (0.16–0.34 mile) at speeds up to 5 mph.
- **Local off-site passenger vehicle travel (one-way):** distances based on are roadway distances (0.9–1.2 miles) on speeds from 5–25 mph, averaged over all emission bins.

[47] Ruettgers & Schuler Civil Engineers. 2025. Warehousing, Manufacturing, and Commercial Development, Northwest Corner of Merle Haggard Drive & Airport Drive. February.

- **Regional Trip Length:** the passenger vehicle employee trip length is assumed to be 9.24 miles per one-way trip based on daily 18.48 employee VMT before Transportation Demand Management (TDM) measures and the quick serve restaurant trip length is assumed to be 6 miles per trip from CalEEMod defaults from TDM nonresidential trip lengths.

Warehouse-related passenger vehicles (primarily employees) and Quick Serve restaurant customer vehicles were categorized based on EMFAC 2021 ONROAD; passenger vehicles are defined as light-duty auto (LDA), light-duty truck type 1 (LDT1) and light-duty truck type 2 (LDT2) and medium-duty vehicles (MDV). The warehouse uses are anticipated to result in 2,982 one-way passenger vehicle trips per day, and the quick serve restaurant use is anticipated to result in 3,079 daily passenger vehicle trips per day.

Trucks

To determine regional emissions from trucks, the proposed project's mobile sources were assessed according to the trip generation rates from the traffic study prepared by Ruettgers & Schuler Civil Engineers, February 2025, "*Warehousing, Manufacturing, and Commercial Development, Northwest Corner of Merle Haggard Drive & Airport Drive*."[48] Emissions were calculated using the trip rates from the traffic study combined with trip distances and vehicle emission factors. Truck exhaust and idling emission factors were derived from EMFAC2021 v.1.0.2 ONROAD model for Kern County for operational year 2028. Truck traffic was distributed to loading docks across the site according to the trip generation rates from the traffic study, and it was assumed that facility operations occur 24 hours per day. Assumptions include:

- **On-site truck travel (round trip)**: distances derived from the site plan (0.79 mile) at speeds up to 5 mph.
- **Local off-site passenger vehicle travel (one-way):** distances are based on two routes west on Merle Haggard (1.2 miles) at speeds of up to 25 mph to the main arterial road.
- **On-site truck idling**: 15 minutes per visit per truck.
- **Trip Length**: the analysis incorporated the Attorney General and ARB recommendations, and the southbound truck trip length was calculated to the Ports of Los Angeles and Long Beach, which are located outside the SJVAB. In addition to Attorney General and ARB recommendations, goods movement studies show that south of Bakersfield, truck traffic is almost exclusively headed to/from locations outside of the SJVAB. [49] Therefore, the truck trip lengths were split into analyses within the SJVAPCD boundary and outside the SJVAPCD boundary. It was assumed that 50 percent of the truck trips had an origin or destination to the Ports of Long

[48] Ruettgers & Schuler Civil Engineers. 2025. Warehousing, Manufacturing, and Commercial Development, Northwest Corner of Merle Haggard Drive & Airport Drive. February.

[49] Kern County Council of Governments (Kern COG). 2012. Kern County Goods Movement Strategy Final Report. Website: https://www.kerncog.org/wp-content/uploads/2010/03/Kern_Goods_Movement_Strategy.pdf. Accessed April 14, 2025.

Beach or Los Angeles (outside SJVAPCD) and 50 percent of the truck trips transited within the SJVAPCD.

- Within the SJVAB boundary, northbound trips on SR-99 as far as 105 miles from the proposed project site (to Delano, Tulare, and Fresno) combined with northbound trips on SR-65 to Porterville (45 miles) and southbound trips on SR-99 to I-5 (46 miles to the SJVAB boundary) comprised a composite air basin trip length of 66.5 miles.
- Outside the SJVAB, southbound trips from the border of the SJVAPCD to the Ports of Los Angeles and Long Beach is approximately 97 miles.

The trucks are broken down by truck type (or axle type) and are categorized as medium heavy-duty truck (MHDT) and heavy heavy-duty truck (HHDT), which represents a mix of large 2, 3, and 4+ axle duty trucks based on a manufacturing truck fleet mix defined by the South Coast Air Quality Management District (South Coast AQMD) and Fontana Truck Studies (60.3 percent HHDT and 39.7 percent MHDT).[50,51] The proposed project is anticipated to generate 824 daily truck trips at the warehouses.

Table 10: Proposed Project Trip Generation

Land Use	Percentage	Travel Route	Destination	One-way Travel Distance
Truck Travel within San Joaquin Valley Air Basin				
Northbound Trucks	35% of within SJVAB	SR-99	Delano, Tulare, Fresno	105 miles
Northbound Trucks	15% of within SJVAB	SR-SR-65	Porterville	45 miles
Southbound Trucks	50% of within SJVAB	SR-99 to I-5	To SoCAB boundary	46 miles
Composite within SJVAB	100%	ALL	ALL	66.5 miles
All trucks	50% of all trucks	Varies	Ports of Los Angeles and Long Beach	97 miles

Notes:
SJVAB = San Joaquin Valley Air Basin
SoCAB = South Coast Air Basin
Source: Appendix A

[50] Inland Empire Logistics Council. 2014. Warehouse Truck Trip Study Data Results and Usage. June.

[51] City of Fontana, County of San Bernardino, State of California. 2003. Truck Trip Generation Study. August.

Fugitive Dust Related to Vehicular Travel

Localized PM emissions from paved road dust are based on CalEEMod defaults for paved road dust, using AP-42 methods and conservative, default silt loadings for paved roadways. Regional roadway dust emission calculations account for travel on less heavily loaded roads (collector, arterials and freeways versus local roads), also based on the January 2011 AP-42 method,[52] consistent with silt contents and vehicle miles used for regional emissions analyses used by Kern COG for their conformity analysis from the 2022 RTP.[53] The details of the Kern County specific aggregate roadway dust factor is included in the supporting calculations in Appendix A.

Stationary Sources

Buildings 1, 2, and 3 are assumed to include one 300-horsepower generator each (three total), providing approximately 225 kW of emergency backup power per building. Building 4, which is substantially larger and includes refrigerated storage, is assumed to include two 300-horsepower generators for emergency systems and one 1,475-horsepower generator to support refrigeration.

In accordance with SJVAPCD Guidance, each generator was assumed to operate up to 100 hours per year for maintenance and testing. Emergency use, such as during power outages, was excluded from modeling because it is not considered reasonably foreseeable. The project site is not located in an area where Public Safety Power Shutoff (PSPS) events are expected to occur. PSPS events are preemptive power outages implemented by utility providers during extreme weather conditions to reduce wildfire risk, and they are typically limited to high fire-threat zones. Since the project site is outside these zones, PSPS-related generator use is not anticipated.

Engines were modeled using a 73 percent load factor, representing typical operational conditions, and assumed to use ultra-low sulfur diesel fuel. Any future installation of generators would be subject to SJVAPCD permitting requirements, including Rule 4702 – Internal Combustion Engines, which mandates the use of California Reformulated Diesel Fuel and Tier 4 Final diesel engines. The permitting process also includes limits on non-emergency operating hours and requires an HRA to evaluate potential impacts on nearby sensitive receptors.

Transport Refrigeration Units Emissions

According to applicant-provided information, approximately 50 percent of Building 4 would be used for cold storage. Trucks serving cold storage uses are assumed to be equipped with TRUs. For modeling purposes, the analysis conservatively assumed that 133 two-way truck trips per day would be from trucks equipped with TRUs.

[52] United States Environmental Protection Agency (EPA). 2011. Section 13.2.1 Paved Roads, AP-42. January.

[53] Kern Council of Governments. 2022. Conformity Analysis for the 2023 Federal Transportation Improvement and the 2022 Regional Transportation Plan. July 21.

TRU operating hours and emission factors were obtained from the California Air Resources Board (ARB) Off-road Emissions Inventory Web Query (v1.1.0) for Kern County, calendar year 2028.[54] Medium-duty trucks were modeled using emission factors and daily usage for truck-mounted TRUs, while heavy-heavy-duty trucks (tractor trailers) were modeled using trailer-mounted TRU data.

Based on TRU inventory activity data, average daily operating hours were estimated as follows:

- Truck TRUs: 0.9 hours per day.
- Trailer TRUs: 1.6 hours per day.

Daily and annual pollutant emissions for criteria pollutants and greenhouse gases were calculated using the most recent ARB inventory emission and activity data.[55] Medium-duty trucks were modeled with truck TRU emission factors, while tractor trailers were modeled with trailer TRU emission factors. The Off-road Web Query Inventory report and detailed TRU emission calculations are provided in Appendix A.

Refrigerants (GHG Only)

During operation, there may be leakages of refrigerants (hydrofluorocarbons) from air conditioners and any refrigeration systems. Hydrofluorocarbons are typically used for refrigerants, which are long-lived GHGs. The defaults for refrigerants in CalEEMod do not reflect the energy efficiency and refrigerant standards applicable to modern cold storage facilities. Although a portion of the proposed project includes cold storage, the default refrigeration load in CalEEMod was removed to avoid overstating emissions as it does not account for compliance with current Title 24 energy efficiency standards or the use of low-GWP refrigerants required by ARB's Refrigerant Management Plan. Instead, total building energy use—including refrigeration—was conservatively captured under the nonresidential electricity category, which reflects the full operational energy profile of the facility. This approach is consistent with ARB and SJVAPCD Guidance, which allows for modification of CalEEMod defaults when project-specific conditions warrant it, and ensures that the analysis remains conservative and representative of actual GHG emissions.

5.3.3 - Operational Emissions Summary

As previously stated, CalEEMod utilizes summer and winter EMFAC2021 emission factors to derive vehicle emissions associated with the proposed project's operational activities, which vary by season. The estimated operational-related emissions are compared against appropriated thresholds and summarized in analysis below. Detailed operational model outputs are presented in Appendix A.

[54] California Air Resources Board (ARB). 2025.Off-road Web Platform. Website: https://arb.ca.gov/emfac/offroad/. Accessed October 29, 2025.

[55] California Air Resources Board (ARB). 2021. 2021 Update to Emissions Inventory for Transport Refrigeration Units. July.

5.4 - Health Risk Assessment for TACs

The methodologies used to evaluate emissions for the proposed project are based on the most recent SJVAPCD Modeling and Health Risk Assessment Guidelines, the SJVAPCD APR 1906 Framework for Performing Health Risk Assessments and guidance from the OEHHA. This HRA evaluates the estimated cancer risk, non-cancer chronic hazard index (HIC), and acute hazard index (HIA) associated with construction and operation of the proposed project to address the SJVAPCD Significance Thresholds.

The primary TAC of concern for the proposed project would be diesel exhaust, characterized by the emissions of DPM as a surrogate, emitted both during construction and operation. The emissions of potential DPM associated with construction activities would be transient, temporary, and occur in varying locations within the project site. The exposure assessment for construction is limited to emissions over the time that construction is expected to occur (i.e.,29 months or 2.4 years). Emissions from operation are assumed to be continuous and residents are assumed to be exposed for up to 70 years as per SJVAPCD Guidance. According to SJVAPCD Guidelines, workers are exposed for up to 40 years.

The HRA evaluates cancer and chronic hazard risks for construction and operations at the Maximally Exposed Individual Resident (MEIR) and Maximally Exposed Individual Worker (MEIW).

This analysis focuses on the impact of the proposed project on identified receptors within 1,000 feet. Receptors include sensitive receptors, off-site workers and schools within a radius of 1,000 feet of the project boundary. There are no schools identified within 1,000 feet of the proposed project.

The analysis consists of three steps:

- Identify and quantify TAC emission sources,
- Use a dispersion model to translate these emissions to concentrations of the TACs at specific off-site locations (called receptors), and
- Perform an HRA based on these exposure concentrations.

The results of the HRA are compared to health specific thresholds of significance as defined by SJVAPCD in the analysis below. These are defined by Cancer Risk and Non-Cancer Hazard Indices for each TAC. The risks and hazards are modeled for a baseline or unmitigated scenario, including all project design features and or standard conditions. If risks from these baseline conditions are above health-based criterion, then mitigation measures are proposed, emissions are recalculated and the procedure is repeated to evaluate a mitigated risk scenario. If risks from the baseline unmitigated scenario are less than SJVAPCD thresholds of significance, then the project is concluded to have a less than significant impact from TAC emissions.

5.4.1 - Source Identification and Quantification

Construction

Construction sources of TAC emissions include DPM exhaust from on-site construction equipment exhaust, and from off-site roadway emissions of diesel-fueled vendor and haul trucks. The off-site emissions from trucks are only included for the emissions on roadways within 1,000 feet of the site.

Operation

Operational emission sources from commercial and industrial projects include DPM from the operation of diesel trucks and associated transport refrigeration generator units, as well as potential emergency backup generators.

5.4.2 - Dispersion Modeling

An air dispersion model is a mathematical formulation used to estimate air quality impacts at specific locations (receptors) surrounding a source of emissions given the rate of emissions and prevailing meteorological conditions. The air dispersion model applied in this assessment was the American Meteorological Society/EPA Regulatory Model (AERMOD), Version 24142, which is approved by the SJVAPCD for air dispersion assessments. Specifically, the AERMOD model was used to estimate levels of air emissions at sensitive receptor locations from project construction PM_{10} exhaust emissions. The AERMOD model provides a refined methodology for estimating localized construction and operational impacts by utilizing long-term, measured representative meteorological data for the project site and representative construction and operational schedules.

Terrain elevations were obtained for the project site using United Stated Geology Survey (USGS) 1/3rd arc-second Digital Elevation Models (DEMs) DEMS processed by the EPA Terrain Preprocessor (AERMAP) model, the AERMOD terrain data preprocessor. The rural dispersion option was used to describe air dispersion in the local vicinity of the project. The air dispersion model assessment utilized 5 years (2018–2022) of SJVAPCD-preprocessed meteorological data for the Bakersfield Station (KBFL WBAN 23155) which is the closest and most representative data for the project site.

The AERMOD model was used to estimate levels of air emissions at sensitive receptor locations from both project construction and project operation.

Air Dispersion Modeling–Construction

Sources of DPM emissions during project construction include on-site diesel-fueled construction equipment, and off-site emissions from haul and vendor trucks traveling on roadways nearby the project site (within 1,000 feet). The modeling assumed 633 net working days of construction. Construction exhaust was modeled as an area source. The release parameters for construction equipment DPM exhaust are consistent with South Coast AQMD recommendations (2008) for gaseous exhaust from construction equipment and the EPA Haul Road Workgroup Final Report released on March 2, 2012, which suggests the use of Adjacent Volume Sources to represent the

haul road emissions. Construction equipment emissions were derived from CalEEMod (Appendix A). The AERMOD air dispersion model was used to estimate the DPM concentrations in the area surrounding the site resulting from the estimated DPM construction emissions. Emissions are modeled in AERMOD as 1 grams per second (g/s) and emission rates for DPM. Receptor locations within the AERMOD model were placed at locations of existing residences surrounding the project site and in the neighborhood to the south and east, to the north and south of Merle Haggard Drive. The modeling domain was extended to 0.5 mile from the boundary of the proposed project in all directions. Receptors were placed on individual residences in the neighborhoods closest to the facility. Receptors were also placed for the nearby off-site workers at locations adjacent to the facility. Finally, a grid was superimposed over the area to allow for identification of the maximum impact and to provide spatial data to generate risk isopleths. All receptors were placed conservatively at ground level.

Air Dispersion Modeling–Operation

Sources of emissions during project operation include idling on-site trucks, TRUs, backup diesel generators, and on-site and off-site truck traffic.

Idling trucks and TRUs were modeled as point sources following SJVAPCD Guidance and inputs for stack and exhaust parameters. The diesel-fueled emergency generators were also modeled as a point source using stack parameters consistent with CAPCOA and ARB's Non-Vehicular Diesel Engine Risk Assessment Guidance.[56] Building dimensions and heights were also included in the modeling to account for the effects of building downwash on the exhaust plumes.

On-site truck traffic emissions (from trucks traversing the project site) were characterized as an area source over the site, and off-site running exhaust for truck travel were modeled as line volume sources following EPA and SJVAPCD Guidance for trucks.

The AERMOD air dispersion model was used to estimate the DPM concentrations in the area surrounding the site resulting from the estimated DPM operational emissions. Receptor locations within the AERMOD model were placed at locations of existing residences surrounding the project site and in the neighborhood to the south and east, to the north and south of Merle Haggard Drive. The modeling domain was extended to 0.5 mile from the boundary of the proposed project in all directions. Receptors were placed on individual residences in the neighborhoods closest to the facility. Receptors were also placed for the nearby off-site workers at locations adjacent to the facility. Finally, a grid was superimposed over the area to allow for identification of the maximum impact and to provide spatial data to generate risk isopleths. All receptors were placed conservatively at ground level.

[56] California Air Pollution Control Officers Association (CAPCOA) and California Air Resources Board (ARB). 2024. Non-Vehicular Diesel Engine Risk Assessment Guidance. July.

5.4.3 - Exposure Assessment – Construction and Operation

Estimation of Cancer Risks

Cancer risks are estimated as the upper-bound incremental probability that an individual would develop cancer as a direct result of exposure to potential carcinogens over a specified exposure duration. The cancer risk attributed to a chemical is calculated by multiplying the chemical intake or dose at the human exchange boundaries (e.g., lungs) by the chemical-specific cancer potency factor (CPF). Cancer risk is expressed in terms of risk per million exposed individuals. A risk level of 10 in 1 million implies a likelihood (or risk) that up to 10 persons out of 1 million equally exposed people would contract cancer if exposed continuously (24 hours per day) to the levels of TACs over a specified duration of time. This risk would be an excess cancer risk that is in addition to any environmental cancer risk borne by a person not exposed to these TACs.

The health risks associated with the exposure to these concentrations are then calculated for each individual receptor based on dose and response parameters. Factors such as an individual's age and body weight and breathing rate determine the dose. Individuals also have varying responses due to a number of factors, with children being more susceptible to health effects due to development. OEHHAs Risk assessment procedures were modified in 2015[57] to account for early childhood health effects and age sensitivity factors are applied to the cancer health risk values. An age sensitivity factor of 10 is applied for infants with exposure starting in the third trimester until age 2. Children from ages 2 to 16 are assumed to be three times more sensitive than adults. No adjustments are made for adult exposure for ages greater than 16. OEHHA Health Risk assessment protocols specify HRAs for residential exposure should start with exposure starting at third trimester, and this approach is used for both the Construction and Operational HRA for the proposed project.

The analysis utilized SJVAPCD policies for HRAs[58] utilizing the OEHHA derived approach for evaluating risk at an individual receptor based on a 70-year exposure residential exposure starting in the third trimester over a 70-year averaging period. As per the SJVAPCD policy, there is no use of spatial averaging, breathing rates of less than 95 percent for all receptors, or reductions in exposure times. Specifically, the HARP2 tool option to apply a "fraction of time at residence" to ages bins greater than or equal to 16 years which is enabled by default, is unselected for performing the HRA. Exposure time and worker adjustments were implemented for the construction HRA consistent with Tier 3 policy implementation. No adjustments were made for the operational HRA.

[57] California Office of Environmental Health Hazard Assessment (OEHHA). 2015. Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments. February. https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf. Accessed April 16, 2025.

[58] San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. APR-1906. Framework for Performing Health Risk Assessments. June 30. Website: https://ww2.valleyair.org/media/0shm0mlk/apr-1906.pdf.

Worker exposures and risks were also calculated using SJVAPCD policies, which differ from OEHHA Tier 1 guidance and HARP2 defaults. Worker exposure is based on OEHHA derived 95th percentile rates and 40-years of exposure beginning at age 16.

Estimation of Chronic Non-cancer Health Effect

An evaluation of potential non-cancer effects of chronic chemical exposures was also conducted.

Risk characterization for non-cancer health hazards from TACs is expressed as a hazard index (HI). The HI is a ratio of the predicted concentration of the project's emissions to a concentration considered acceptable to public health professionals, termed the Reference Exposure Level (REL). The HI assumes that chronic exposures to TACs adversely affect a specific organ or organ system (toxicological endpoint) of the body. For each discrete chemical exposure, target organs presented in regulatory guidance were used. To calculate the HI, each chemical concentration or dose is divided by the appropriate toxicity REL. For compounds affecting the same toxicological endpoint, this ratio is added together. Where the total equals or exceeds 1, a health hazard is presumed to exist.

To quantify non-carcinogenic impacts, the chronic HI is derived by using the annual average concentration of TAC as derived from the air dispersion model ($\mu g/m^3$). This value is then compared to the REL above which a significant impact is assumed to occur ($\mu g/m^3$).

The OEHHA has defined a REL for Diesel Exhaust of 5 $\mu g/m^3$. The principal toxicological endpoint assumed in this assessment was the respiratory system via the inhalation exposure pathway. DPM does not have any identified short-term or acute RELs.

Estimation of Acute Non-Cancer Health Effect

The project's non-cancer acute health risks were not estimated because OEHHA has not established an acute REL for DPM and there are no acute non-cancer risk values associated with DPM.

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6 - AIR QUALITY ANALYSIS

This section calculates expected emissions from project construction and operation as a necessary requisite for assessing the project emissions on a regional and local level. The methodology follows the SJVAPCD's CEQA Guidelines, which set forth recommended thresholds of significance and analysis methodologies and provides guidance on measures to reduce emissions.

6.1.1 - Thresholds of Significance

This analysis uses the air quality significance thresholds contained in Appendix G of the CEQA Guidelines, as well as guidelines established by the Kern County Planning Department and the SJVAPCD.

The SJVAPCD's quantitative air pollution significance thresholds are the following:

Table 11: San Joaquin Valley Air Pollution Control District Significance Thresholds

Pollutant	Construction Thresholds (TPY)	Operational Thresholds (TPY)	
		Permitted Equipment and Activities	Non-Permitted Equipment and Activities
ROG	10	10	10
NO_X	10	10	10
CO	100	100	100
SO_X	27	27	27
PM_{10}	15	15	15
$PM_{2.5}$	15	15	15

Notes:
CO = carbon monoxide
NO_X = oxides of nitrogen
PM_{10} = particulate matter with aerodynamic diameter less than 2.5 microns
$PM_{2.5}$ = particulate matter with aerodynamic diameter less than 10 microns
ROG = reactive organic gases
SO_X = sulfur oxides
TPY = tons per year

Source:
San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impact.

The SJVAPCD also provides thresholds for localized significance of 100 pounds per day of any criteria pollutant after implementation of all enforceable measures. Projects with emissions above

these thresholds would be required to conduct an Ambient Air Quality Analysis to demonstrate that the emissions of criteria pollutants would not cause localized impacts or concentrations exceeding Ambient Air Quality Standards.

In addition, the SJVAPCD also contains the following significance thresholds for TACs:

- **Carcinogens:** Maximally exposed individual risk equals or exceeds 20 in one million.
- **Non-carcinogens, Acute:** Hazard Index equals or exceeds 1 for the maximally exposed individual.
- **Non-carcinogens, Chronic:** Hazard Index equals or exceeds 1 for the maximally exposed individual.

6.1.2 - Consistency with Air Quality Management Plan

AIR-1:	**The proposed project could conflict with or obstruct implementation of the applicable air quality plan.**

Consistency with Air Quality Management Plan

In general, a project would not interfere with the applicable Air Quality Plan (AQP) if it were consistent with growth assumptions used to form the applicable AQP and if the project implements all reasonably available and feasible air quality control measures.

Air quality impacts are controlled through policies and provisions of the SJVAPCD, the Kern County General Plan, and the Kern County Code of Building Regulations. The CCAA requires air pollution control districts with severe or extreme air quality problems to provide for a 5 percent reduction in nonattainment emissions per year. The Attainment Plans prepared for the SJVAPCD comply with this requirement. The ARB reviewers approve or amend the document and forward the plan to EPA for final review and approval within the SIP.

Implementation of the proposed project would generate both temporary (construction) and long-term (operational) emissions, which could conflict with or obstruct with an applicable AQP. As such, the proposed project impacts could be potentially significant before mitigation.

Air quality impacts are controlled through policies and provisions of the SJVAPCD, the Kern County General Plan, and the Kern County Code of Building Regulations. Each project should also demonstrate consistency with the SJVAPCD's adopted AQP for ozone and PM_{10}. The SJVAPCD is required to submit a "Rate of Progress" document to the ARB that demonstrates past and planned progress toward reaching attainment for all criteria pollutants. The AQP prepared for the San Joaquin

Valley by SJVAPCD complies with this requirement. ARB reviewers approve or amend the document and forward the plan to the EPA for final review and approval within the SIP.

This document proposes the following criteria for determining project consistency with the current AQPs:

- **Criterion 1:** Will the project support the primary goals of the AQP?
- **Criterion 2:** Will the project comply with applicable control measures in the AQP?
- **Criterion 3:** Will the project disrupt or hinder implementation of any AQP control measures?

Furthermore, the SJVAPCD's GAMAQI states that "projects with emissions below the thresholds of significance for criteria pollutants would be determined to not conflict with or obstruct implementation of the District's air quality plan."

Implementation of the proposed project would generate both temporary construction and long-term operational emissions, which could conflict with or obstruct air quality attainment and maintenance planning efforts. Consistency with AQPs is typically conducted based on a comparison of project-generated growth in employment, population, and VMT within the region, which is used for development of the emissions inventories contained in the AQPs. In addition, as stated above, projects that exceed SJVAPCD Significance Thresholds would also be considered to have a potentially significant cumulative impact to regional air quality, which could interfere with regional air quality attainment and maintenance planning efforts.

The proposed project is not consistent with current zoning and general plan land use designations, and therefore the proposed project would not automatically be considered consistent with employment and VMT growth projections. However, as noted below, project-generated emissions would not SJVAPCD's project-level significance thresholds and impacts would be less than significant. Furthermore, the proposed project contains all reasonable available and feasible air quality control measures, including incorporation of SJVAPCD Regulation VIII dust measures and compliance with SJVAPCD Rule 9510.

Construction

The proposed project would comply with all applicable SJVAPCD Rules and Regulations during construction. The proposed project would not exceed any SJVAPCD Significance Thresholds on an annual basis (with implementation of recommended measures), as shown in Table 12 and Table 14. Additionally, as discussed in more detail below under the localized impact analysis, the emissions from construction of the proposed project would not exceed the SJVAPCD daily localized significance thresholds for NOx, CO, and PM_{10}. Therefore, emissions are presumed to be below levels that would result in localized exceedances of the Ambient Air Quality Standards and a project-specific Ambient Air Quality Analysis (AAQA) was not required. Moreover, emissions would be further reduced with the required compliance of the proposed project with SJVAPCD's Rule 9510 (ISR Rule), which requires projects to reduce NO_x emissions by 20 percent. Therefore, the proposed project would not result in

emissions of a magnitude that would obstruct the air quality planning goals set forth by the SJVAPCD. During construction, the proposed project would incorporate Standard Permit Conditions 1 through 3 in order to further reduce impacts from fugitive dust, including applying dust suppressant material; limiting vehicle speeds; and watering exposed areas during construction, among others.

The proposed project's construction emissions from heavy-duty, off-road equipment would not exceed the SJVAPCD's significance thresholds, as shown in **Table 12**. The mobile source control measures pertaining to heavy-duty, off-road equipment identified in the SJVAPCD's *2022 Plan* are also not applicable. Therefore, the proposed project's construction activities would neither conflict with nor obstruct implementation of the applicable AQPs.

Overall, based on the above, with implementation of PCs 1 through 4 any potential impacts to criteria pollutants designated as nonattainment within the SJVAPCD would be reduced and construction of the proposed project would not result in a conflict with or obstruct implementation of applicable AQPs.

Operation

The proposed project would comply with all applicable SJVAPCD Rules and Regulations during operation. Because the proposed project would include stationary sources (backup generators) during operation, the proposed project would comply with the requirements of the stationary control measures identified in the SJVAPCD's *2022 Ozone Plan* and Kern County's *2017 Ozone Attainment Plan*. However, as shown in Table 14, the proposed project would exceed the SJVAPCD's regional operational threshold for NOx Impacts even after incorporation of PCs.

Permit Conditions

PCs are attributes of the proposed project which would be required to be implemented by the SJVAPCD and/or by Kern County. Therefore, those conditions are presumed to be implemented and are accounted for in the modeling which estimates baseline emissions.

PC AIR-1 The project shall continuously comply with the following: Construction and operation of the project shall be conducted in compliance with applicable rules and regulations set forth by the San Joaquin Valley Air Pollution Control District (SJVAPCD). Dust control measures outlined below shall be implemented where they are applicable and feasible. The list shall not be considered all-inclusive, and any other measures to reduce fugitive dust emissions not listed shall be encouraged.

a. Land Preparation, Excavation and/or Demolition. The following dust control measures shall be implemented:
   i. All soil excavated or graded shall be sufficiently watered to prevent excessive dust. Watering shall occur as needed with complete coverage of disturbed soil areas. Watering shall take place a minimum of twice daily on unpaved/untreated roads and on disturbed soil areas with active operations.
   ii. All clearing, grading, earthmoving, and excavation activities shall cease during periods of winds greater than 20 miles per hour (averaged over one hour), if

disturbed material is easily windblown, or when dust plumes of 20 percent or greater opacity impact public roads, occupied structures, or neighboring property.

iii. All fine material transported off-site shall be either sufficiently watered or securely covered to prevent excessive dust.

iv. Areas disturbed by clearing, earthmoving, or excavation activities shall be minimized at all times.

v. Stockpiles of dirt or other fine loose material shall be stabilized by watering or other appropriate method to prevent windblown fugitive dust.

vi. Where acceptable to the Kern County Fire Department, weed control shall be accomplished by mowing instead of disking, thereby, leaving the ground undisturbed and with a mulch covering.

b. Site Construction. After clearing, grading, earthmoving and/or excavating is completed within any portion of the project sites, the following dust control practices shall be implemented:

i. Once initial leveling has ceased, all temporality open and inactive soil areas within the construction site shall be (1) seeded and watered until plant growth is evident, (2) treated with a dust palliative, or (3) watered twice daily until soil has sufficiently crusted to prevent fugitive dust emissions.

ii. Dependent on specific site conditions (season and wind conditions), revegetation shall occur in open areas.

iii. All active disturbed soil areas shall be sufficiently watered at least twice daily or have dust palliatives applied to prevent excessive dust.

c. Vehicular Activities. During all phases of construction, the following vehicular control measures shall be implemented:

i. On-site vehicle speed shall be limited to 15 miles per hour.

ii. All areas with vehicle traffic shall be paved, treated with dust palliatives or watered a minimum of twice daily.

iii. Streets adjacent to the project sites shall be kept clean, and project-related accumulated silt shall be removed.

iv. Access to the project sites shall be by means of an apron into the project sites from adjoining surfaced roadways. The aprons shall be surfaced or treated with dust palliatives. If operating on soils that cling to the wheels of vehicles, a grizzly, wheel washer, or other such device shall be used on the road exiting the project sites, immediately prior to the pavement, in order to remove most of the soil material from vehicle tires.

PC AIR-2 Prior to issuance of any grading permit, the project proponent shall submit a Site-Specific Dust Control Plan for review and approval by the Kern County Planning and Natural Resources Department. The Site-Specific Dust Control Plan shall serve to minimize fugitive dust emissions during project construction. The Site-Specific Dust Control Plan shall take into consideration grading and construction schedule,

seasonal winds, site-specific wind patterns and soil conditions to ensure adequate measures are implemented to manage fugitive dust. The Site-Specific Dust Control Plan shall:

a. Identify a comprehensive grading schedule for the entire project site. When feasible, grading activities shall be minimized to those areas necessary for project access.
b. The Site-Specific Dust Control Plan shall identify, in addition to those measures required by the air district, all measures being undertaken during construction activities and operational activities to ensure fugitive dust being blown off-site is minimized. Measures may include, but are not limited to:
    i. Use of water trucks as required for the expected level of winds in the area.
    ii. Use of dust suppressant (i.e., soil binders or mulch).
    iii. Pre-seeding and irrigating prior to construction to create vegetation with useful root structures.
    iv. Construction of dust screening in appropriate locations around the project site (i.e., fence slats or mesh screening).
    v. A copy of the approved Site-Specific Dust Control Plan shall be kept at the on-site construction office and all measures included in the Site-Specific Dust Control Plan shall be included on all Grading Plans issued for the project by the Kern County Public Works Department.

PC AIR-3 The project shall continuously comply with the following: The project applicant and/or its contractors shall implement the following measures during construction of the project:

a. All equipment shall be maintained in accordance with the manufacturer's specifications.
b. Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for extended periods of time.
c. Construction equipment shall operate longer than eight cumulative hours per day.
d. Electric equipment shall be used whenever possible in lieu of diesel or gasoline powered equipment.
e. All construction vehicles shall be equipped with proper emissions control equipment and kept in good and proper running order to substantially reduce NO_X emissions.
f. On-road and off-road diesel equipment shall use diesel particulate filters (or the equivalent) if permitted under manufacturer's guidelines.
g. Tier 3 engines shall be used on all equipment when available.

PC AIR-4 Compliance with Assembly Bill (AB) 98 Requirements. The proposed project shall implement the following measures:

a) Orient truck loading bays on the opposite side of the logistics use development away from sensitive receptors to the extent feasible.
b) Locate truck entry, exit, and internal circulation away from sensitive receptors. Heavy-duty diesel truck drive aisles shall be prohibited from being used on sides of the building that are directly adjacent to a sensitive receptor property line.
c) Include buffering and screening to mitigate for light and noise: Buffer areas shall include a solid decorative wall, landscaped berm and wall, or landscaped berm 10 feet or more in height, drought-tolerant natural ground landscaping with proper irrigation, and solid screen buffering trees as described below.

   Trees shall be used as part of a solid screen buffering treatment and planted in two rows along the length of the property line adjacent to the sensitive receptor. Trees used for this purpose shall be evergreen, drought-tolerant, to the extent feasible, composed of species with low biogenic emissions, of a minimum 36-inch box size at planting, and spaced at no greater distance than 40 feet on center. Palm trees shall not be utilized.
d) Complies with or exceeds all requirements of the most current building energy efficiency standards specified in Part 6 (commencing with Section 100) of Title 24 of the California Code of Regulations and the California Green Building Standards Code (Part 11 of Title 24 of the California Code of Regulations), including, but not limited to, the following requirements related to:
   a. Photovoltaic system installation and associated battery storage.
   b. Cool roofing.
   c. Medium- and heavy-duty vehicle charging readiness.
   d. Light-duty electric vehicle charging readiness and installed charging stations.
f) e) Provides conduits at loading bays equal to one truck per every loading bay serving cold storage. Idling or use of auxiliary truck engine power to power climate control equipment shall be prohibited if the truck is capable of plugging in at the loading bay. Ensures that any heating, ventilation, and air conditioning (HVAC) is high efficiency.
g) Have a separate entrance for heavy-duty trucks accessible via a truck route, arterial road, major thoroughfare, or a local road that predominantly serves commercial oriented uses.

AIR-2:	**The proposed project would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State Ambient Air Quality Standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).**

The proposed project would be associated with air pollutant emissions from project construction and project operation, which would have regional effects and localized effects.

Regional Analysis

This analysis assesses the regional effects of the proposed project's criteria pollutant emissions in comparison to SJVAPCD thresholds of significance for short-term construction activities and long-term operation of the proposed project.

The primary pollutants of concern during project construction and operation are ROG, NO_x, PM_{10}, and $PM_{2.5}$. The SJVAPCD GAMAQI adopted in 2015 contains thresholds for CO, NO_x, ROG, SO_x, PM_{10}, and $PM_{2.5}$.[59]

Ozone is a secondary pollutant that can be formed miles from the source of emissions, through reactions of ROG and NO_X emissions in the presence of sunlight. Therefore, ROG and NO_X are termed ozone precursors. The SJVAB often exceeds the State and national ozone standards. Therefore, if the proposed project emits a substantial quantity of ozone precursors, the proposed project may contribute to an exceedance of the ozone standard. The SJVAB also exceeds air quality standards for PM_{10} and $PM_{2.5}$; therefore, substantial project emissions may contribute to an exceedance for these pollutants.

The proposed project does not contain sources that would produce substantial quantities of SO_2 emissions during construction and operation.

Construction Emissions

The proposed project would require the construction of approximately 11.36 acres of roadway and frontage improvements, located along Petrol Road, Airport Drive, Merle Haggard Way and Landings Way, both on and off-site. The proposed construction schedule and equipment assignment are based on CalEEMod defaults and are presented in Appendix A, and discussed in the Project Description.

Emissions from construction activities are relatively short-term. However, on a regional level, even short-term activities can have significant impacts on air quality. Construction emissions consist mainly of exhaust emissions (NO_X and PM) from construction equipment and other mobile sources, and

[59] San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI). February 19.

fugitive dust (PM) emissions from earthmoving activities. Construction activities also result in area source emissions such as emissions from paving and architectural coatings.

Table 12 shows that criteria pollutant emissions would not exceed any of the SJVAPCD's regional thresholds of significance during construction of the proposed warehouse project. It should be noted that unmitigated construction emissions incorporate the basic dust control measures required under SJVAPCD Rule 8201, which requires that vehicle speeds on unpaved roads and surfaces be reduced to no more than 15 miles per hour and exposed construction areas are watered during earthmoving activities. The emissions do not include rule 9510 ISR Clean Fleet Commitments for the proposed project which would reduce NO_X emissions by an additional 20 percent and total PM_{10} emissions by another 45 percent.

Table 12: Construction Emissions by Building/Area

Building/Area	Year	Criteria Pollutant Emissions (tons/year)					
		ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Retail	2025	0.02	0.13	0.15	0.0003	0.02	0.01
	2026	0.15	0.99	1.16	0.0023	0.04	0.03
Building 4	2026	0.49	4.07	4.98	0.0097	0.91	0.42
	2027	2.53	1.81	3.05	0.0058	0.47	0.15
Roadway Improvements	2026	0.08	0.63	0.74	0.0013	0.14	0.07
	2027	0.04	0.16	0.27	0.0004	0.03	0.01
Buildings 1 and 2	2026	0.16	1.33	1.68	0.0031	0.31	0.14
	2027	1.31	1.17	2.03	0.0037	0.29	0.09
Building 3	2027	0.18	1.48	2.08	0.0039	0.25	0.12
	2028	0.51	0.35	0.54	0.0010	0.05	0.02
2025 Annual		**0.02**	**0.13**	**0.15**	**0.000**	**0.02**	**0.01**
2026 Annual		**0.89**	**7.01**	**8.57**	**0.016**	**1.40**	**0.66**
2027 Annual		**4.06**	**4.63**	**7.43**	**0.014**	**1.05**	**0.37**
2028 Annual		**0.51**	**0.35**	**0.54**	**0.001**	**0.05**	**0.02**
SJVAPD Annual Thresholds		10	10	100	27	15	15
Do Construction Emissions Exceed Regional Thresholds?		**No**	**No**	**No**	**No**	**No**	**No**

Building/Area	Year	Criteria Pollutant Emissions (tons/year)					
		ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$

Notes:
CO = carbon monoxide
NO_X = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in diameter
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
ROG = reactive organic gases
SO_X = sulfur oxides
Totals may not add up due to rounding. CalEEMod 2022 Output files are contained in Appendix A.

Operational Emissions

As detailed in Section 3, Methodology, emissions of criteria pollutants from the operation of the proposed project would result from area sources, mobile sources, stationary sources, and fugitive dust. The proposed project would be all-electric and would not utilize natural gas, and therefore there are no energy sources from on-site combustion processes. It is anticipated that there would be six diesel emergency generators. Model outputs and assumptions are available in Appendix A.

Table 13: Operational Emissions Compared to SJVAPCD Thresholds—Without Recommended Measures

Emission Source	Annual Criteria Pollutant Emissions (tons/year)					
	ROG	NO_X	CO	SOx	PM_{10}	PM2.5
Area–Consumer Products	5.92	—	—	—	—	—
Area–Architectural Recoating	0.35	—	—	—	—	—
Area–Landscape Equipment	0.97	0.05	5.93	<0.01	0.008	0.008
Energy–Natural Gas	—	—	—	—	—	—
Mobile–Trucks	0.38	26.32	4.29	0.27	4.13	1.47
Trucks–TRUs	0.33	2.54	0.31	0.004	0.07	0.06
Mobile–Employee Passenger Vehicles	1.14	0.78	10.83	0.03	1.04	0.28
Mobile–Retail Passenger Vehicles	1.14	0.63	8.44	0.02	0.70	0.19
Stationary Sources–Six Emergency Diesel Engines (within Buildings 1–4)	0.24	0.89	0.62	0	0.04	0.04
Total	**10.47**	**31.21**	**30.42**	**0.324**	**5.99**	**2.05**
SJVAPCD Annual Thresholds	**10**	**10**	**100**	**27**	**15**	**15**
Do Operational Emissions Exceed Thresholds?	**Yes**	**Yes**	**No**	**No**	**No**	**No**

Emission Source	Annual Criteria Pollutant Emissions (tons/year)					
	ROG	NO_X	CO	SOx	PM_{10}	PM2.5

Notes:
CO = carbon monoxide
NO_X = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in diameter
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
ROG = reactive organic gases
SJVAPCD = San Joaquin Valley Air Pollution Control District
SOX = sulfur oxides

Mobile Source Emissions from EMFAC2021 v.1.0.2 presented in this table do not account for reductions from the H&D IM Rule. They also do not show any ISR 9510 Adjustments.
It is conservatively assumed that all TRU emissions occurred within the SJVAB.
SJVAPCD Rule 9510 ISR requirement is to reduce a development project's operational NOx and total PM_{10} emissions by 33.3% and 50%, respectively. The emissions estimates do not account for reductions which would occur pursuant to SJVAPCD Rule 9510.
Source: CalEEMod Output files are contained in Appendix A.

As shown in Table 13, operational-related emissions would exceed the SJVAPCD's regional significance thresholds for ROG from emissions from consumer products, architectural coating, landscape equipment, trucks, TRUs, employee passenger vehicles, and retail passenger vehicles. The operational-related emissions would also exceed SJVAPCD's regional significance thresholds for NOx from emissions of landscape equipment, trucks, TRUs, and passenger vehicles.

Options to reduce operational emissions of ROG may include:

- Utilize only low ROG cleaning supplies (also known low VOC cleaning supplies) in perpetuity.
- Utilize only low ROG paint supplies (also known low VOC paint supplies) in perpetuity.

These options available to reduce the majority of ROG emissions caused by area sources during operations would require the use of restricted supplies and equipment by future occupants in perpetuity. Future occupants (including residents and workers) would have access to consumer products available in the marketplace. Regulation of consumer products available on the marketplace is not within the control of any individual project applicant or lead agency. Therefore, requiring the use of only low ROG supplies and equipment in perpetuity is neither feasible nor enforceable. However, it is feasible to require the use of low ROG paint supplies, and therefore AIR-1 is included as a recommended measure to reduce emissions of ROG.

Main sources of both ROG and NO_X come from vehicle exhaust. Most of the vehicles driven as a result of the proposed project are conservatively assumed to be private vehicles owned by future residents and workers and by truck serving the warehouse. Similar to consumer products, regulation of private vehicles is not within the control of any individual project applicant or lead agency. However,

the percentage of gasoline fueled vehicles would drastically reduce as the State transitions to ZEVs pursuant to various laws and regulations within a robust regulatory framework.

Another main source of ROG and NO_X comes from the use of landscape equipment. However, as noted in the Project Description, all landscape equipment would be electric to eliminate ROG and NO_X emissions from this emissions source.

The emergency backup diesel generators would be subject to stringent SJVAPCD permitting requirements which would require ultra-low sulfur diesel fuel use and Tier 4 final engines.

Finally, TRUs represent a source of both ROG and NO_X. The following measure is recommended to reduce TRU emissions, and is both feasible and enforceable:

- Prior to the issuance of occupancy permits, the Kern County Planning Department will require that the tenant lease agreements include contractual language that requires all TRUs entering the project site be plug-in capable. Electrical hookups shall be provided as part of the tenant improvements for any tenant that requires cold storage. The electrical hookups shall be provided at all loading bays for truckers to plug in any onboard auxiliary equipment and power refrigeration units while their truck is stopped.

  Idling or use of auxiliary truck engine power to power climate control equipment shall be prohibited if the truck is capable of plugging in at the loading bay. If the truck cannot plug-in, idling will be limited to 3 minutes (pursuant to SJVAPCD recommendations) and idling of TRUs will be limited to 5 minutes. In addition:

  a. All equipment shall be maintained in accordance with the manufacturer's specifications.

  b. All equipment, including TRUs, heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 5 minutes.

  To reduce idling emissions from trucks and TRUs, the project applicant/developer shall have signage placed at truck access gates, loading docks, and truck parking areas that clearly notes idling is strictly prohibited on the subject property. In coordination with Kern County, the project applicant/developer shall also place similar signs in the adjacent streets in the project area. At minimum, each sign placed outside the interior premises of the subject property shall note the idling prohibition on the adjacent streets and include telephone numbers of the building facilities manager and the California Air Resources Board to report violations. All signage shall be made of weather-proof materials. All site and architectural plans submitted to Kern County shall note the locations of these signs. Prior to issuance of occupancy permits, Kern County shall verify compliance with these requirements herein.

Table 14 shows operational-related emissions with implementation of recommended measures and electrification of landscape equipment (as detailed in the Project Description). As demonstrated in the table, emissions would still exceed SJVAPCD thresholds for NOx even with implementation of the identified measures.

Table 14: Operational Emissions Compared to SJVAPCD Thresholds—With Recommended Measures

Emission Source	Annual Criteria Pollutant Emissions (tons/year)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area–Consumer Products	5.92	—	—	—	—	—
Area–Architectural Recoating	0.35	—	—	—	—	—
Area–Landscape Equipment	—	—	—	—	—	—
Energy–Natural Gas	—	—	—	—	—	—
Mobile–Trucks	0.38	26.32	4.29	0.27	4.13	1.47
Trucks–TRUs	0.12	0.96	0.11	0.002	0.03	0.03
Mobile–Employee Passenger Vehicles	1.14	0.78	10.83	0.03	1.04	0.28
Mobile–Retail Passenger Vehicles	1.14	0.63	8.44	0.02	0.70	0.19
Stationary Sources –Emergency Diesel Engines (Buildings 1—4)	0.24	0.89	0.62	0	0.04	0.04
Total	9.29	29.58	24.29	0.322	5.94	2.01
SJVAPCD Annual Thresholds	**10**	**10**	**100**	**27**	**15**	**15**
Do Operational Emissions Exceed Thresholds?	**No**	**Yes**	**No**	**No**	**No**	**No**

CO = carbon monoxide
NO_X = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in diameter
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
ROG = reactive organic gases
SO_X = sulfur oxides

Conservatively assumed that all TRU emissions were in the SJVAB.

San Joaquin Valley Air Pollution Control District (SJVAPCD) Rule 9510 ISR requirement is to reduce a development project's operational NOx and total PM_{10} emissions by 33.3% and 50%, respectively. The emissions estimates do not account for reductions which would occur pursuant to SJVAPCD Rule 9510.

Source: CalEEMod Output files are contained in Appendix A.

Therefore, based on the nonattainment status of the air basin, regional health risks associated with air quality impacts and the requirement under CEQA that all reasonable and feasible mitigation be required, AIR-3 is recommended to require the execution of a DMA with the SJVAPCD for reduction of criteria pollutants. The implementation of a DMA to reduce criteria pollutants of NO_X, ROGs, and PM net incremental emissions generated by a project has been incorporated into development projects in Kern County since 2008.

This is the same instrument and pathway the SJVAPCD calls a Voluntary Emission Reduction Agreement (VERA). Once applied it is not a "voluntary" agreement with the SJVAPCD but is mandated by enforceable measures and is, therefore, called a DMA. The emission reductions required by a DMA are normally implemented within the SJVAB in quantities sufficient to fully mitigate the project's air quality impacts such that development of the project could be considered to result in no net increase in the designated criteria pollutant emissions over the criteria pollutant emissions that would otherwise exist without the development of the project, all to be verified by the SJVAPCD. The mandated emission reductions will be achieved by a menu of options that range from paying a calculated fee for use in doing emission reduction projects through a grant-type program to applicants in a pre-determined area. The executed DMA will require the payment of a calculated fee per ton to the SJVAPCD. The agreement also includes an additional administrative fee of 4 percent collected for the SJVAPCD. Expenditure of the funds is then done for certified air quality reduction projects through the SJVAPCD. Final determination of air quality reductions achieved shall be under the determination of the SJVAPCD.

As implemented, the DMA results in greater reductions than would otherwise occur under the District's ISR, since the ISR does not require ROG reductions and the ISR only requires a percentage of reductions rather than full reductions of NO_X and PM resulting from project construction and operations. When adopting the ISR and the subsequent VERA/DMC programs, the SJVAPCD acknowledges that as ROG is a precursor to ozone, the reductions are not required in the VERA/DMA. Instead, the reductions are achieved by increasing the NO_X and PM tonnage for project levels; see relevant SJVAPCD documents included as Appendix A.

The proposed project would still exceed regional thresholds for NO_X, and therefore it is recommended that the proposed project would be required to utilize the DMA to reduce NOx emissions. The actual amount of NOx reductions achieved is not absolutely certain; however, all feasible and reasonable measures will be required to reduce criteria pollutants as close to "no net increase" as scientifically possible. This approach has been found legally sufficient by court rulings in the following cases; *California Building Industry Assn. v. San Joaquin Valley APCD*, Fresno County Case No. 06 CECG 02100 DS13; *National Association of Home Builders v. San Joaquin Valley Air Pollution Control District*, Federal District Court, Eastern District of California, Case No. 1:07-CV-00820-LJO-DLB; and *Center for Biological Diversity et al. v. Kern County*, Fifth Appellate District, Case No. F061908.

Localized Pollutant Analysis (AAQA Screening)

Emissions occurring at or near the project site have the potential to create a localized impact also referred to as an air pollutant hotspot. Localized emissions are considered significant if when combined with background emissions, they would result in exceedance of any health-based air quality standard. In locations that already exceed standards for these pollutants, significance is based on a significant impact level (SIL) that represents the amount that is considered a cumulatively considerable contribution to an existing violation of an air quality standard.

The SJVAPCD's GAMAQI includes screening thresholds for identifying projects that need detailed analysis for localized impacts. Projects with on-site emission increases from construction activities or operational activities that exceed the 100 pounds per day screening level of any criteria pollutant after compliance with Rule 9510 and implementation of all enforceable mitigation measures would require preparation of an AAQA. The criteria pollutants of concern for localized impact in the SJVAB are PM_{10}, $PM_{2.5}$, NO_X, and CO. CO violations require heavy traffic volumes and extreme traffic congestion that would not occur at or near the project site; therefore, operational CO emission hotspots are highly unlikely.

An analysis of average daily emissions during construction and operation was conducted to determine whether emissions would exceed the localized SJVAPCD 100 pounds per day screening threshold for any pollutant of concern.

The proposed project would not exceed daily emission thresholds during construction or operation for any pollutant of concern.

Construction

Construction emissions were estimated as described in Section 5, Methodology, and were based on the average daily emissions derived from the CalEEMod Construction Modeling (Appendix A). This approach is recommended by SJVAPCD Guidance for evaluating projects where site-specific construction phasing is not yet available. Daily criteria air pollutant emissions during construction are presented in Table 15 and compared against the localized SJVAPCD screening thresholds.

Table 15: Daily Criteria Air Pollutant Emissions during Project Construction

Construction Activity	Daily Emissions (lbs/day)[1,2,3]				
	ROG	NO_X	CO	PM_{10}[2]	$PM_{2.5}$
2025	1.3	11.7	12.9	0.024	1.4
2026	6.8	53.7	65.7	0.125	10.7
2027	31.1	35.4	56.9	0.105	8.0
2028	11.7	7.9	12.3	0.023	1.1
Overall Average	17.3	38.3	52.7	0.1	7.9
AAQA Screening Threshold	**100**	**100**	**100**	**100**	**100**
Exceed screening threshold?	**No**	**No**	**No**	**No**	**No**

Notes:
Conservatively includes all construction emissions including mobile sources operating outside of the 0.25 mile of the site boundary.
CO = carbon monoxide
NO_X = nitrogen oxides

Construction Activity	Daily Emissions (lbs/day)[1,2,3]				
	ROG	NO_X	CO	PM_{10}[2]	$PM_{2.5}$

PM_{10} = particulate matter less than 10 microns in diameter
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
ROG = reactive organic gases

1. Average Daily Emissions are determined by dividing total on-site construction emissions by days where construction occurs (23 working days in 2025, 261 net working days in 2026 and 2027 and 88 working days in 2028, for a total of 633 working days). This follows guidance from SJVAPCD Guidance for projects where project-specific construction schedule is unknown. CalEEMod phasing modeled is for purposes of overall emissions characterization and is not meant to simulate the construction intensity or efforts on a granular, daily basis.
2. PM_{10} and $PM_{2.5}$ emissions are from the mitigated output to reflect compliance with Regulation VIII—Fugitive PM_{10} Prohibitions.
3. Emissions are based on total construction emissions (rather than only those within .25 mile; including the entirety of the construction vehicle emissions represents a conservative analysis). This conservative analysis captures any emissions from on-road vehicles idling at the site and lower speeds in the vicinity of the site. Since these total emissions are below AAQA thresholds it was determined that refining the analysis to capture only the .25 mile radius was unnecessary.

Source of Emissions: CalEEMod Output (Appendix A).

The proposed project would not exceed SJVAPCD screening thresholds for requiring additional ambient air quality modeling.

Operation

Maximum daily on-site criteria pollutant emissions for operation were determined by conducting a project-specific analysis using a project level of EMFAC2021 v.1.0.2 Project Level (e.g., EMFAC-PL) for the first operational year of 2028. This project-specific analysis considered emissions from passenger vehicles and trucks based on predicted daily vehicle trips from the *Traffic Study, Warehousing, Manufacturing, and Commercial Development, Northwest Corner or Merle Haggard Drive & Airport Drive* by Ruettgers & Schuler Civil Engineers, February 2025, separated by passenger vehicles visiting the warehouse sites (employees), customers visiting the two retail quick serve restaurants and medium heavy-duty and heavy heavy-duty trucks visiting the warehouse. Site-specific travel routes both on-site and within 0.25 mile were evaluated for all three land use trip types based on the site layout and local off-site roadways. Emissions for passenger vehicles included evaporative losses in addition to cold start, idling and running exhaust emissions. Emissions for trucks included cold start emissions, idling on-site, running exhaust (on and off-site) and the on-site operation of TRUs associated with the 265 daily truck trips (133.5 average daily truck visits) associated with the cold storage warehouse (Building 4). Specific parameters for the modeling outputs as well as the EMFAC-PL emission factors for San Joaquin Valley – Kern County year 2028 are included in Appendix A.

Emissions were estimated as described above and compared against relevant thresholds. The emissions estimates assume electrified landscaping equipment and implementation of recommended measures to reduce TRU emissions.

Table 16: Local Daily Criteria Air Pollutant Emission Estimates for Project Operation

Operations	Maximum Daily Pollutant Emissions (lbs/day)				
	ROG	NO_X	CO	PM_{10}	PM2.5
Area–Consumer Products	32.4	—	—	—	—
Area–Architectural Coating	1.9	—	—	—	—
Area–Landscaping	—	—	—	—	—
Energy	—	—	—	—	—
Mobile–Trucks and TRUs	2.45	37.09	10.86	1.64	0.71
Warehouse–Passenger Vehicles	4.65	1.23	28.84	2.83	0.75
Retail–Passenger Vehicles	0.18	0.32	12.72	2.14	0.56
Stationary Sources–-Six Emergency Diesel Engines (Buildings 1–4)	9.76	35.41	24.90	1.44	1.44
Total Emissions (lbs)	**51.34**	**74.05**	**77.32**	**8.05**	**3.46**
Screening Threshold	**100**	**100**	**100**	**100**	**100**
Exceed screening threshold?	**No**	**No**	**No**	**No**	**No**
Screening Threshold	**100**	**100**	**100**	**100**	**100**
Exceed screening threshold?	**No**	**No**	**No**	**No**	**No**

Notes:
Includes sources operating within 0.25 mile of the site boundary.
CO = carbon monoxide
lbs = pounds
NO_X = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in diameter
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
ROG = reactive organic gases
TRU = Transport Refrigeration Unit

Maximum Daily Emissions occur during the Summer Season for all pollutants (ROG, NOx, CO, PM_{10} and $PM_{2.5}$)

CalEEMod for Building Area Source Emissions.

EMFAC-PL emission calculations or vehicle exhaust and road dust based on Kern County-specific emission factors, project-specific operational parameters related to on-site and local off-site vehicle idling, speeds, distances, cold-starts.

Source of Emissions: Appendix A.

As shown, the proposed project would not exceed SJVAPCD screening thresholds for requiring additional ambient air quality modeling.

Recommended Measures

Implement PC AIR-1, PC AIR-2, PC AIR-3, and PC-4. In addition, the following measures are recommended to reduce emissions:

AIR-1 Prior to issuance of building permits, the project applicant/developer shall demonstrate to the satisfaction of the Kern County Planning that the project applicant shall require the use of super compliant, low-VOC (low volatile organic compound) paints (less than 10 grams per liter [g/L]) during the architectural coating construction phase of project construction, and during project maintenance.

AIR-2 Prior to the issuance of occupancy permits, the Kern County Planning Department will require that the tenant lease agreements include contractual language that requires all Transport Refrigeration Units (TRUs) entering the project site to be plug-in capable. Electrical hookups shall be provided as part of the tenant improvements for any tenant that requires cold storage. The electrical hookups shall be provided at all loading bays for truckers to plug in any onboard auxiliary equipment and power refrigeration units while their truck is stopped.

Idling or use of auxiliary truck engine power to power climate control equipment shall be prohibited if the truck is capable of plugging in at the loading bay. In addition:

a. All equipment shall be maintained in accordance with the manufacturer's specifications.
b. All equipment, including TRUs, heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 5 minutes.

To reduce idling emissions from trucks and TRUs, the project applicant/developer shall have signage placed at truck access gates, loading docks, and truck parking areas that clearly notes idling is strictly prohibited on the subject property. In coordination with Kern County, the project applicant/developer shall also place similar signs in the adjacent streets in the project area. At minimum, each sign placed outside the interior premises of the subject property shall note the idling prohibition on the adjacent streets and include telephone numbers of the building facilities manager and the California Air Resources Board to report violations. All signage shall be made of weather-proof materials. All site and architectural plans submitted to Kern County shall note the locations of these signs. Prior to issuance of occupancy permits, Kern County shall verify compliance with these requirements herein.

AIR-3 Prior to issuance of any grading or construction permits the project applicant/developer shall enter into a Developer Mitigation Agreement (DMA) with the San Joaquin Valley Air Pollution Control District (SJVAPCD). The DMA is to offset criteria emissions of the project implementation, not required to be offset under an SJVAPCD Rule, and for proposed project vehicle and all other mobile source

emissions. The project applicant/developer shall pay fees to fully offset project emissions of oxides of nitrogen (NO_X), reactive organic gases (ROG), particulate matter less than 10 microns in diameter (PM_{10}), and particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) (including as applicable mitigating for reactive organic gases by additive reductions of PM_{10}) (collectively, "designated criteria emissions") to avoid any net increase in these pollutants. The air quality offset fee shall further be paid prior to the approval of any construction or grading approval and shall be used to reduce designated criteria emissions to fully offset project emissions that are not otherwise required to be fully offset by SJVAPCD permit rules and regulations.

AIR-3: The proposed project would not expose sensitive receptors to substantial pollutant concentrations.

Sensitive receptors are particularly sensitive to air pollution because they are persons that are ill, elderly, or have lungs that are not fully developed. Locations where such persons reside, spend considerable amount of time, or engage in strenuous activities are also referred to as sensitive receptors. Typical sensitive receptors include inhabitants of long-term healthcare facilities, rehabilitation centers, convalescent centers, retirement homes, residences, schools, playgrounds, child care centers, and athletic facilities. The nearest residential areas are to the east of the project area, and both to the north and south of Merle Haggard Drive. The nearest residence is approximately 400 feet to the southeast of the proposed project site. In addition, the nearest existing schools include North High School located approximately 1 mile southeast of the project site, Wingland Elementary School located approximately 1.15 miles southeast of the project site, and Lifehouse Christian Academy located approximately 1.35 miles southeast of the project site.

Toxic Air Contaminants

During construction and operation, the proposed project would result in emissions of several TACs that could potentially impact nearby sensitive receptors. As described in Section 5, Methodology, the principal TAC emission analyzed in this assessment was DPM during construction and operation. For purposes of this analysis, DPM is represented as exhaust emissions of PM_{10}. DPM represented as exhaust PM_{10} adequately addresses impacts from PM_{10} and $PM_{2.5}$ emissions, as $PM_{2.5}$ comprises a component of PM_{10}.

Exposures to TACs can also result in both short-term (acute) or long-term (chronic) non-cancer health impacts. Such impacts could include illnesses related to reproductive effects, respiratory effects, eye sensitivity, immune effects, kidney effects, blood effects, central nervous system, birth defects, or other adverse environmental effects. The proposed project's non-cancer acute health risks were not estimated because OEHHA has not established an acute REL for DPM and there are no acute non-cancer risk values associated with DPM.

Construction

A HRA was performed for construction DPM emissions according to the methodologies described in Section 5, Methodologies, to estimate the proposed project's cancer and non-cancer chronic health risks. DPM emissions by construction area and phase are presented in Table 17. The cancer risk at the MEIR and MEIW are provided in Table 18. The maximum impacted residence was determined to be a single-family home located 400 feet from the project site. Table 18 also summarizes the health risks at the nearest off-site worker. As illustrated therein, construction of the proposed project would not result in increased cancer risk or HI in excess of SJVAPCD's significance thresholds.

Table 17: DPM Emissions from Project Construction

Construction Area/Phase	Construction Year	On-site $PM_{10}E$ (lbs)	Off-site $PM_{10}E$ (lbs)	Total $PM_{10}E$ (lbs)
Retail	**2025**	11.05	0.01	11.06
	2026	69.64	0.29	69.93
Building 4	**2026**	307.00	5.89	312.89
	2027	93.80	11.56	105.36
Roadway and Frontage Improvements	**2026**	50.62	0.00	50.62
	2027	9.93	0.80	10.73
Buildings 1 and 2	**2026**	99.11	2.17	101.28
	2027	62.12	6.71	68.84
Building 3	**2027**	103.11	2.47	105.58
	2028	20.40	1.24	21.64
	TOTAL	826.78	31.13	857.91

Notes:
$PM_{10}E$ = PM_{10} exhaust, which is a surrogate for diesel exhaust, particulate matter.
Source: Appendix A

Table 18: Summary of Construction Health Risks at the Maximum Exposed Receptors

Impact Scenario	Location (coordinates)	DPM Conc (µg/m)	Chronic Non-cancer Hazard Index	Cancer Risk (per Million)
Maximally Exposed Individual Resident (MEIR)	315086.66 m E 3923842.45 m N	0.016	<0.01	5.46
Maximally Exposed Individual Worker (MEIW)	314750 m E 3923850 m N	0.028	0.01	0.73

Impact Scenario	Location (coordinates)	DPM Conc (µg/m)	Chronic Non-cancer Hazard Index	Cancer Risk (per Million)
Thresholds of Significance		**1**	**1**	**20**
Exceeds SJVAPCD Threshold?		**No**	**No**	**No**

Notes:
µg/m^3 = micrograms per cubic meter
DPM = diesel particulate matter
SJVAPCD = San Joaquin Valley Air Pollution Control District

There are no schools in the 0.5 mile buffer zone. The nearest school is more than 1 mile away and the risk would be less than any maximum residential receptor. In addition, the calculated cancer risks drop below 1 in 1 million at the northeast corner of the project site and drop below 1 in 1 million at approximately 2,000 feet southwest of the project site. Therefore, due to the distance of the schools (1 mile and more from the project site), it is estimated that any cancer risks would be below 1 in 1 million at the location of the schools.
Source: Appendix A

Operation

During operation, the proposed project would generate passenger vehicle trips from employees and visitors and would generate truck trips from trucks servicing the warehouses, some of which would be equipped with TRUs. In addition, the proposed project is anticipated to include six backup diesel generators (across Buildings 1–4). The main source of DPM from the long-term operations of warehouses is from combustion of diesel fuel in diesel-powered engines in heavy-duty trucks, the TRUs, and (to a lesser extent) the backup diesel generators. Motor vehicle emissions refer to DPM exhaust emissions from the motor vehicle traffic that would travel to and from the project site each day.

An estimate of the number of vehicle trips that the proposed project would generate was provided in Table 9 of the project-specific traffic analysis, which indicates the proposed project would generate 824 truck trips per day, with 265 trips with associated TRUs. An operational HRA was conducted as described in Section 5, Methodology, to estimate the proposed project's cancer and non-cancer chronic health risks. The truck fleet mix (for purposes of estimating emissions) was assumed to be 60.3 percent heavy heavy-duty and 39.7 percent medium heavy-duty.[60] All TRUs were assumed to be placed at the southeast corner of Building 4, which represents the worst-case scenario due to the direction of the prevailing winds and the location of the nearest residences. The backup diesel generators were placed on the exterior southeast corner of Building 1 and Building 2; the exterior southwestern corner of Building 3, and the exterior northeastern and exterior southeastern corners of Building 4, which also represent the worst-case scenario due to the direction of the prevailing winds and the location of the nearest residences.

[60] City of Fontana, County of San Bernardino, State of California. 2003. Truck Trip Generation Study. August.

The cancer risk at the MEIR and MEIW are provided in Table 19. The MEIR was found to be a residence south of Merle Haggard Drive to the east of the proposed project.

Table 19: Summary of Unmitigated Operational Health Risks at the Maximum Exposed Receptors

Impact Scenario	Location (coordinates)	DPM Conc (µg/m)	Chronic Non-cancer Hazard Index	Cancer Risk (per million)
Maximally Exposed Individual Resident (MEIR)	314958 m E 3923714 m N	0.0085	0.002	8.88
Maximally Exposed Individual Worker (MEIW)	314650 m E 3923850 m N	0.042	0.008	4.21
Thresholds of Significance		**1**	**1**	**20**
Exceeds Individual Source Threshold?		**No**	**No**	**No**

Notes:
$\mu g/m^3$ = micrograms per cubic meter
Source: Appendix A

As shown in Table 19, cancer risks would not exceed SJVAPCD thresholds. However, as recommended under Impact AIR-2, the proposed project would be assumed to implement measures to limit TRU idling to no more than 30 minutes. In addition, as stated in the Project Description, the proposed project would utilize all-electric landscaping equipment. Therefore, as presented in Table 20, an analysis was conducted to estimate the cancer risk at the MEIR and MEIW with implementation of these measures.

Table 20: Summary of Mitigated Operational Health Risks at the Maximum Exposed Receptors

Impact Scenario	Location (coordinates)	DPM Conc ($\mu g/m^3$)	Chronic Non-cancer Hazard Index	Cancer Risk (per Million)
Maximally Exposed Individual Resident (MEIR)	314959 m E 3923771 m N	0.0029	0.001	5.23
Maximally Exposed Individual Worker (MEIW)	314650 m E 3923850 m N	0.0211	0.004	2.09
Thresholds of Significance		**1**	**1**	**20**
Exceeds Individual Source Threshold?		**No**	**No**	**No**

Notes:

Impact Scenario	Location (coordinates)	DPM Conc ($\mu g/m^3$)	Chronic Non-cancer Hazard Index	Cancer Risk (per Million)
$\mu g/m^3$ = micrograms per cubic meter Source: Appendix A				

As illustrated above, operation of the proposed project with implementation of recommended measures would not result in increased cancer risk or HI in excess of SJVAPCD's significance thresholds.

CO Hotspots

Regionally, project-related construction travel would add to regional trip generation and increase the VMT within the local airshed and the SJVAB. Locally, traffic during construction and operations of the proposed project would be added to the roadway system in the vicinity of the project site. Although the SJVAPCD is currently an attainment area for CO, there is a potential for the formation of microscale CO "hotspots" to occur immediately around points of congested traffic. Typically, high CO concentrations are associated with urban roadways or intersections operating at an unacceptable Level of Service (LOS). Therefore, the SJVAPCD has established that if neither of the following criteria are met at all intersections affected by the developmental project, the project would result in no potential to create a violation of the CO standard:

- A traffic study for the proposed project indicates that the LOS on one or more streets or at one or more intersections in the project vicinity would be reduced to LOS E or F; or
- A traffic study indicates that the proposed project would substantially worsen an already existing LOS F on one or more streets or at one or more intersections in the project vicinity.

If either of the above criteria can be associated with any intersection affected by the proposed project, the project proponent would need to conduct a CO analysis.

CO violations require heavy traffic volumes and extreme traffic congestion that would not occur at or near the project site. As stated in the project's Traffic Study dated February 2025, the addition of project traffic to the existing and future street system results in LOS deficiencies at certain locations. Each of these deficiencies should be addressed with proposed improvements to be incorporated as part of project design or as a transportation mitigation. Therefore, because the proposed project would not result in heavy traffic volumes nor extreme traffic congestion, no further CO Hotspot analysis is required.

Visibility Impacts

Kern County has established criteria to determine whether a project would potentially result in a visibility impact; however, the SJVAPCD has not established guidance to address visibility in CEQA

documents. Per the Kern County guidelines, a visibility analysis is not required since the proposed project is not a large industrial stationary source project or a mining project, and it would not have long-term operational components that could generate dust or emissions plumes related to visibility. Compliance with Regulation VIII, including implementation of all feasible dust control measures specified in SJVAPCD's GAMAQI[61] and incorporated into a Dust Control Plan, is sufficient to reduce air quality effects from construction-related PM_{10} emissions.

Valley Fever

The proposed project has the potential to generate fugitive dust and suspend Valley Fever spores within the dust that could then reach nearby sensitive receptors. It is possible that on-site workers could be exposed to Valley Fever as fugitive dust is generated during construction. However, as discussed in Section 2.1.2, due to its former agricultural/cultivated land use, the project site would have low probability of C. immitis (Valley Fever) growth on-site or exposure from disturbed soil.

During construction, compliance with dust control regulations would further reduce the potential to expose sensitive receptors to Valley Fever. The proposed project would be required to comply with Rule 8021 Section 6.3, which requires applicants to develop, prepare, submit, obtain approval of, and implement a Dust Control Plan, which would reduce fugitive dust impacts to less than significant for all construction phases of the proposed project, which would also control the release of the CI fungus from construction activities. Exposure to the CI fungus would be potentially significant and PC AIR-1 is provided to further reduce impacts associated with Valley Fever and to protect on-site construction workers and nearby receptors.

During operations, the project site would be built up and would not provide a conducive environment for Valley Fever.

Asbestos

Naturally occurring asbestos can be released from serpentinite and ultramafic rocks when the rock is broken or crushed. As discussed in more detail in Section 2.1.2, exposure to naturally occurring asbestos can occur during soil-disturbing activities in areas with deposits present. At the point of release, the asbestos fibers may become airborne, causing air quality and human health hazards. These rocks have been commonly used for unpaved gravel roads, landscaping, fill projects, and other improvement projects in some localities. Asbestos may be released to the atmosphere due to vehicular traffic on unpaved roads, during grading of development projects, and at mining operations.

Review of the Department of Conservation maps indicates that the project site and San Joaquin County do not have reported historic asbestos mines, historic asbestos prospects, and other natural occurrences of asbestos (DOC 2000).

[61] San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI). February 19.

AIR-4: The proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Odor impacts on residential areas and other sensitive receptors, such as hospitals, daycare centers, schools, etc. warrant the closest scrutiny, but consideration should also be given to other land uses where people may congregate, such as recreational facilities, worksites, and commercial areas.

While offensive odors rarely cause any physical harm, they can be unpleasant, leading to considerable distress among the public and often resulting in citizen complaints to local governments. Odors can cause a variety of responses. The impact of an odor is dependent on interacting factors such as frequency (how often), intensity (strength), duration (in time), offensiveness (unpleasantness), location, and sensory perception. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress and often generating citizen complaints to local governments and regulatory agencies.

According to the SJVAPCD, analysis of potential odor impacts should be conducted for the following two situations:

Generators: projects that would potentially generate odorous emissions proposed to locate near existing sensitive receptors or other land uses where people may congregate, and

Receivers: residential or other sensitive receptor projects or other projects built for the intent of attracting people locating near existing odor sources.

The SJVAPCD provides a suggested screening distance for a variety of odor-generating land uses and operations. Those distances are used as a guide to assess whether nearby facilities could be sources of significant odors. These screening distances by type of odor generator are listed in Table 21.

Table 21: Screening Levels for Potential Odor Sources

Land Use/Type of Operation	Project Screening Distance
Wastewater Treatment Facilities	2 miles
Sanitary Landfill	1 mile
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	1 mile
Chemical Manufacturing	1 mile
Fiberglass Manufacturing	1 mile

Land Use/Type of Operation	Project Screening Distance
Painting/Coating Operations (e.g., auto body shop)	1 mile
Food Processing Facility	1 mile
Feed Lot/Dairy	1 mile
Rendering Plant	1 mile
Source: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI). February 19.	

The proposed warehouse project is not in the category of generator sources listed in Table 22, nor is a fast food restaurant listed in Table 22, and neither warehouses nor fast food restaurants are known sources of odorous emissions.

Furthermore, the proposed project is an industrial project and is not considered a sensitive receptor that would need to consider odors as a "receiver." There are no significant concerns related to odors or a need for further odor assessment of the project operations.

The proposed project has the potential to emit odors during construction activities from sources such as the exhaust from diesel-fueled construction equipment, or during the application of architectural coatings. However, because of the low intensity of these emissions, intermittent and short-term nature of construction activities, and highly diffusive properties of diesel exhaust, a substantial number of nearby receptors would not be affected by odors associated with project construction. Odors from these sources would be localized and generally confined to the immediate area surrounding the project site. The proposed project would utilize typical construction techniques, and odors would be typical of most construction sites and temporary in nature.

Conclusion

Neither construction nor long-term operations of the proposed project are anticipated to generate any significant objectionable odors that affect a substantial number of people. Considering the low intensity of potential odor emissions, the proposed project's operational activities would not expose receptors to objectionable odor emissions.

7 - GREENHOUSE GAS EMISSIONS ANALYSIS

7.1 - CEQA Guidelines

The CEQA Guidelines define a significant effect on the environment as "a substantial, or potentially substantial, adverse change in the environment." To determine whether a proposed project would have a significant impact on GHGs, the type, level, and impact of emissions generated by the proposed project must be evaluated.

7.1.1 - Thresholds of Significance for the Proposed Project

The following criteria is established in CEQA Guidelines Appendix G, to determine whether a project could potentially have a significant adverse effect on GHGs. A project would have a significant impact on GHGs if it would:

> Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
>
> Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The adopted CEQA Guidelines provide regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHG and global climate change impacts.

Section 15064.4(b) of the CEQA Guidelines' 2018 amendments for GHG emissions states that a lead agency may take into account the following three considerations in assessing the significance of impacts from GHG emissions.

Consideration No. 1: The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.

Consideration No. 2: Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.

Consideration No. 3: The extent to which the project complies with regulations or requirements adopted to implement a Statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared

for the project. In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.

A quantitative analysis was prepared for this project to determine the extent to which it may increase or reduce GHG emissions as compared to the existing environmental setting to fulfill Consideration 1; however, this analysis was completed for informational purposes only.

Regarding Consideration 2, the SJVAPCD implemented a tiered approach to evaluating GHG emissions; however, in light of *Center for Biological Diversity v. California Department of Fish and Wildlife* and SB 32, the quantitative threshold presented in SJVAPCD's CAP is no longer appropriate for determining significance of project-related GHG emissions. Moreover, the SJVAPCD BAU thresholds of 29 percent were developed for consistency with AB 32 2020 target reductions, which is a past goal. SJVAPCD has not developed new inventories or targets for reductions aligned with 2030 SB 32 GHG reductions, or beyond. Therefore, use of the SJVAPCD thresholds under Consideration 2 are not applied to this project.

For Consideration 3, as described above, the analysis prepared for the proposed project is based on a qualitative evaluation of the project's consistency with State and local regulations and policies adopted for the reduction and/or mitigation of greenhouse gas emissions. Kern County has not developed a quantified threshold of significance for GHG emissions; therefore, the proposed project is evaluated based on its consistency with the adopted ARB Climate Change Scoping Plan and progress toward 2030 goals. This includes qualitative assessments of compliance with ARB applicable regulations as well as the 2022 Scoping Plan

7.2 - Greenhouse Gas Emissions

GHG-1:	**The proposed project would generate direct and indirect greenhouse gas emissions; however, these emissions would not result in a cumulatively considerable contribution to a significant impact on the environment.**

Implementation of the proposed project would contribute to global climate change through direct emissions of GHG from on-site area sources and vehicle trips generated by the proposed project, and indirectly through off-site energy production required for on-site activities, water use, and waste disposal. GHGs associated with the proposed project would be CO_2, CH_4, and N_2O, and would be emitted from on-road vehicles and equipment used during construction and from vehicles used during routine operational activities. The estimated GHG emissions from construction and operational activities associated with the proposed project are shown below.

Project Emissions (for Informational Purposes)

Construction

The proposed project's construction emissions were estimated according to the methods described in Section 5, Methodology, and are presented in Table 23. It should be noted that the analysis conservatively assumes that construction would begin in December 2025; as vehicle and equipment fuel efficiencies and emission control standards continue to incrementally improve with each year, project construction emissions are likely to decrease nominally from what is shown in Table 22 should the construction schedule move to later years. Therefore, the construction GHG emissions contained in Table 22 represent a conservative assessment of project construction emissions.

Table 22: Proposed Project Construction GHG Emissions

Area	Year	Total GHG Emissions (MT CO_2e per year)
Retail	2025	26
	2026	205
Building 4	2026	1191
	2027	918
Frontage Improvements	2026	147
	2027	62
Buildings 1 and 2	2026	395
	2027	578
Building 3	2027	465
	2028	127
Subtotal 2025		26
Subtotal 2026		1,939
Subtotal 2027		2,023
Subtotal 2028		127
Total Construction Emissions		4,114
Emissions Amortized Over 30 Years		137

Notes:
GHG = greenhouse gas
MT CO_2e = metric tons carbon dioxide equivalent
Source: Appendix A.

As shown above, the proposed project would generate approximately 4,114 MT CO_2e during construction. There is no existing or proposed construction-related climate impact threshold at this time. GHG emissions from construction represent a very small portion of a project's lifetime GHG emissions. The proposed thresholds for land use projects are designed to address operational GHG emissions, which represent the vast majority of project GHG emissions. Furthermore, construction GHG emissions are amortized over 30 years–which is the typical operational life of a project–and accounted for as part of operational GHG emissions. Operational GHG impact is discussed below.

Operation

Operational or long-term emissions occur over the life of the project. Project operations were modeled for the 2028 operational year, immediately following the completion of construction. Sources for operational emissions are summarized below and are described in more detail in Section 5, Modeling Parameters and Assumptions. Sources for operational GHG emissions would include:

- **Motor Vehicles:** These emissions refer to GHG emissions from the exhaust from the cars and trucks that would travel to and from the project site.
- **Off-road Engines (TRUs):** These emissions refer to GHG emissions from the exhaust from the TRUs on refrigerated trucks visiting Building 4.
- **Indirect Electricity:** These emissions refer to those generated by off-site power plants to supply electricity required for the project.
- **Area Sources:** These emissions refer to those produced during activities such as landscape maintenance. Because the proposed project will utilize all-electric landscaping equipment, the emissions reflected in the table below are zero.
- **Stationary Sources:** These emissions refer to the GHG emissions from the exhaust from the diesel engines used to power emergency backup generators.
- **Water Transport:** These emissions refer to those generated by the electricity required to transport and treat the water to be used on the project site.
- **Waste:** These emissions refer to the methane GHG emissions produced by decomposing landfill waste generated by the project.

Table 23 presents the estimated annual GHG emissions from the proposed project's operational activities. As shown in Table 24, the proposed project would generate approximately 54,172 MT CO_2e per year after the inclusion of 137 MT CO_2e per year associated with amortized project construction.

Table 23: Operational GHG Emissions

GHG Emissions Source	GHG Emissions (MT CO_2e per year)
Area	0

GHG Emissions Source	GHG Emissions (MT CO_2e per year)
Energy	139
Mobile (within SJVAB)	32,534
Mobile (within SoCAB)	19,874
Transport Refrigeration Units	471
Stationary Sources	114
Waste	510
Water	485
Amortized Construction Emissions	137
Total Annual Project Emissions	54,266

Notes:
GHG = greenhouse gas
Area Source = All-electric landscaping equipment
MT CO_2e = metric tons carbon dioxide equivalent
SJVAB = San Joaquin Valley Air Basin
SoCAB = South Coast Air Basin
Source: Appendix A.

As discussed under the Air Quality Analysis, a number of measures are recommended to reduce air pollutant emissions which will also reduce GHGs, including the limiting of TRU idling and the electrification of landscape equipment. The proposed project's emissions were estimated with the recommended measures and are shown in Table 24 below.

Table 24: Mitigated Operational GHG Emissions

GHG Emissions Source	GHG Emissions (MT CO_2e per year)
Area	—
Energy	—
Mobile (within SJVAB)	32,534
Mobile (within SoCAB)	19,874
Transport Refrigeration Units	174
Stationary Sources	114
Waste	510
Water	485

GHG Emissions Source	GHG Emissions (MT CO_2e per year)
Amortized Construction Emissions	137
Total Annual Project Emissions	53,967

Notes:
GHG = greenhouse gas
MT CO_2e = metric tons carbon dioxide equivalent
SJVAB = San Joaquin Valley Air Basin
SoCAB = South Coast Air Basin

Emissions include anticipated reductions form implementation of recommended measures which provide for zero-energy building consumption and TRU Plug-in requirements limiting on-site TRU usage to 0.5 hours per truck visit.

The full truck trip length from the proposed project to the Ports of Los Angeles and/or Long Beach were estimated and disclosed for informational purposes. While a portion of the emissions would occur outside of the SJVAB, because GHG emissions are global pollutants, they are included for a robust and transparent analysis.

Source: Appendix A.

As previously discussed, the SJVAPCD does not have a currently valid method for determining whether the proposed project would be a cumulatively considerable contributor or whether the proposed project contributes to solving the cumulative problem of climate change, taking into consideration the State's long-term climate goal of carbon neutrality by 2045.

In addition, the County does not have a Qualified GHG Reduction Strategy that meets the criteria set forth in CEQA Guidelines Section 15183.5(b).

Therefore, the proposed project is evaluated against Consideration 3 as set forth in Section 15064.4(b) of the CEQA Guidelines 2018 amendments for GHG emissions based on a qualitative evaluation of the project's consistency with State and local regulations and policies adopted for the reduction and/or mitigation of greenhouse gas emissions.

AB 98 and SB 415

The proposed project would be required to comply with AB 98 (with recent amendments from SB 415) to ensure implementation of a variety of project features that will serve to reduce air pollutants/TACs, as well as GHGs. Compliance with AB 98, as clarified by SB 415, would require the proposed project to incorporate energy efficiency measures aligned with the most current California Building Energy Efficiency Standards. SB 415 also mandates anti-idling protocols at loading bays with available plug-in infrastructure and reinforces the applicability of these standards to all logistics use developments. Compliance would require the proposed project to incorporate energy efficiency measures to reduce emissions, including:

Energy Efficiency and Reduced Emissions:

- Conformity with California's Green Building Standards (Part 6 and Part 11 of Title 24).
- Installation of photovoltaic systems and associated battery storage.
- Cool roofing and light-emitting diode (LED) efficient lighting.
- Medium- and heavy-duty vehicle charging readiness.
- Light-duty EVCS.
- High-efficiency HVAC systems.
- Transition to zero-emission forklifts and other equipment used on-site.
- Microgrid-ready switchgear systems capable of supporting renewable energy sources.
- Advanced smart metering readiness.

Truck and Equipment Requirements:

- Conduits and electrical hookups at all loading bays serving cold storage to reduce truck idling.
- Minimum levels of EVCS and conduit for additional future stations.

Consistency with 2022 Scoping Plan

The 2022 Scoping Plan identifies three priority areas where emissions reductions are targeted to achieve its long-term goal of carbon neutrality. Those priority areas include transportation electrification; VMT reduction; and building decarbonization.

- **Building decarbonization:** All-electric design. According to applicant-provided information, the proposed project would have an all-electric design and would therefore demonstrate consistency with this key priority area.
- **VMT impact**: According to the Traffic Study report by Ruettgers & Schuler dated August 2024 and updated February 2025, the proposed project would have a significant VMT impact.[62] Therefore, the proposed project is inconsistent with this design element.
- **Transportation Electrification**: Most of the vehicles driven as a result of the proposed project are conservatively assumed to be private vehicles owned by future visitors and workers and by trucks serving the warehouse. Regulation of private vehicles is not within the control of any individual project applicant or lead agency. Therefore, there are no feasible mitigation measures that can directly reduce this impact, and the proposed project would be inconsistent with this priority area of the Scoping Plan.

Project Mobile Emissions Compared to RTP/SCS Goals

The RTP/SCS proposes a regional development pattern that, if implemented, is capable of achieving Kern COGs regional VMT reduction target, as established by ARB. ARB certified the RTP/SCS and the proposed development pattern contained therein. A project would be considered to be consistent with the RTP/SCS if the project is consistent with the proposed development pattern contained within

[62] Ruettgers & Schuler. 2025. Traffic Study Warehousing, Manufacturing and Retail Commercial Development. February.

the RTP/SCS. As shown on page 4-26 of the RTP/SCS, the proposed project is located in an area designated for Strategic Employment under the RTP/SCS' proposed regional development pattern. The proposed project would fall under that development category, and is therefore consistent with the RTP/SCS. Furthermore, when discussing the logistics industry, the RTP/SCS explains on page 4-18, "Given Kern's location at the geographic population center of California, logistically and environmentally, Kern is the best location in the State with the lowest carbon footprint to centralize distribution services to the rest of the State."[63]

Conclusion

The proposed project would demonstrate consistency with a variety of County and State plans and policies that are in place to reduce GHG emissions from land use development and meet longer term goals. However, the proposed project would not be consistent with the 2022 Scoping Plan, as it will not be feasible to electrify all transportation—in specific, the trucks—that will be associated with operation of the project. Furthermore, the proposed project would have not meet employee VMT reduction targets. Although the proposed project may be required to implement TDM program to reduce VMT, it is unclear whether the TDM program would reduce project VMT to sufficient levels. Furthermore, the VMT analysis does not account for truck trips, which represent a significant portion of GHG emissions (as shown in Table 24). However, when compared to relevant climate goals related to reducing GHG emissions from mobile sources, as discussed above, the proposed project would be consistent with the RTP/SCS.

Recommendations to reduce GHG emissions include implementing EV charging capabilities beyond what is required by CALGreen; implementing the use of zero-emission equipment; and reducing overall GHG emissions to the greatest extent feasible by either installing solar panels with sufficient capacity to provide for 100 percent of the project's energy needs or by procuring the equivalent from the local utility provider. Although these recommended measures would significantly reduce overall GHG emissions, they would not reduce GHG impacts to less than significant levels.

Recommended Measures

Implementation of PCs and measures to reduce air pollutants will also serve to reduce GHGs. In addition, the following measures are recommended to further reduce GHG emissions.

GHG-1 Prior to issuance of occupancy permits, the project applicant/developer shall demonstrate to the satisfaction of the Kern County Planning and Natural Resources Department, that the proposed parking areas for passenger automobiles are designed and will be built to accommodate electric vehicle (EV) charging stations. At minimum, the parking shall be designed to accommodate a number of EV charging stations equal the Tier 2 Nonresidential Voluntary Measures of the California Green Building Standards Code (CALGreen), Section A5.106.5.3.2.

[63] Kern Council of Governments. 2022. 2022 Regional Transportation Plan/Sustainable Communities Strategy. July.

GHG-2 100 percent Renewable Energy Development or Procurement

Prior to the issuance of grading and building permits for the project, the project applicant shall provide documentation to the Director of Planning, Building and Code Enforcement or the Director's designee at Kern County for review and approval demonstrating that the proposed project will implement one of the following measures:

- Install solar panels, solar hot water, or other clean energy power generation sources on the proposed project site to provide 100 percent of the proposed project's energy needs; or
- Participate in Pacific Gas and Electric Company (PG&E) Solar Choice program for nonresidential (i.e., 100 percent carbon-free electricity) for electricity accounts associated with the project to procure 100 percent of the proposed project's electricity needs from renewable energy.

GHG-2: The proposed project would conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

As discussed above, GHG emissions were evaluated based on whether the proposed project would be consistent with the State's applicable GHG reduction goals, plans, policies, and regulatory requirements as well as other federal, State, and local policies, as provided in the following analyses.

Consistency With Local GHG Reduction Plans

There are no applicable local GHG reduction plans in place for the proposed project to conflict with.

Consistency With Regional GHG Reduction Plans (RTP/SCS)

The RTP/SCS proposes a regional development pattern that, if implemented, is capable of achieving Kern COGs regional VMT reduction target, as established by ARB. ARB certified the RTP/SCS and the proposed development pattern contained therein. A project would be considered to be consistent with the RTP/SCS if the project is consistent with the proposed development pattern contained within the RTP/SCS. As shown on page 4-26 of the RTP/SCS, the proposed project is located in an area designated for Strategic Employment under the RTP/SCS' proposed regional development pattern. The proposed project would fall under that development category, and is therefore consistent with the RTP/SCS. Furthermore, when discussing the logistics industry, the RTP/SCS explains on page 4-18, "Given Kern's location at the geographic population center of California, logistically and environmentally, Kern is the best location in the State with the lowest carbon footprint to centralize distribution services to the rest of the State."[64]

[64] Kern Council of Governments. 2022. 2022 Regional Transportation Plan/Sustainable Communities Strategy. July.

Consistency With 2022 Scoping Plan

The 2022 Scoping Plan identifies three priority areas where emissions reductions are targeted to achieve its long-term goal of carbon neutrality. Those priority areas include transportation electrification; VMT reduction; and building decarbonization.

- **Building decarbonization:** All-electric design. According to applicant-provided information, the proposed project would have an all-electric design and would therefore demonstrate consistency with this key priority area.
- **VMT impact**: According to the Traffic Study report by Ruettgers & Schuler dated August 2024 and updated February 2025, the proposed project would have a significant VMT impact.[65] Therefore, the proposed project is inconsistent with this design element.
- **Transportation Electrification**: Most of the vehicles driven as a result of the proposed project are conservatively assumed to be private vehicles owned by future visitors and workers and by trucks serving the warehouse. Regulation of private vehicles is not within the control of any individual project applicant or lead agency. Therefore, there are no feasible measures that can directly reduce this impact, and the proposed project would be considered to be inconsistent with this priority area of the Scoping Plan.

CALGreen Code

The proposed project would be required to comply with the most recent update to the CALGreen Code that aims to achieve energy savings and GHG reductions beyond the State's minimum requirements.

Summary

The proposed project would be consistent with the Kern County RTP/SCS but would be inconsistent with the 2022 Scoping Plan due to significant VMT impacts and non-electric vehicular emissions because it will not be feasible to electrify all transportation—in specific, the trucks—that will be associated with operation of the proposed project. Although the proposed project would be required to implement TDM program to reduce VMT, it is unclear whether the TDM program would reduce project VMT to below thresholds. Furthermore, the VMT analysis does not account for truck trips, which represent a significant portion of GHG emissions (as shown in Table 24).

To reduce GHG emissions, it is recommended that the proposed project implement EV charging capabilities beyond what is required by CALGreen and promote the use of zero-emission equipment. It is also recommended that the proposed project reduce overall GHG emissions to the greatest extent feasible by either installing solar panels with sufficient capacity to provide for 100 percent of the project's energy needs or by procuring the equivalent from the local utility provider.

[65] Ruettgers & Schuler. 2025. Traffic Study Warehousing, Manufacturing and Retail Commercial Development. February.

8 - ENERGY ANALYSIS

Energy usage associated with the proposed project was estimated and assessed using the following methods.

8.1 - Methodology–Energy

8.1.1 - Construction

Fuel consumption for on-site construction equipment and off-site construction vehicles are calculated using results and data used in CalEEMod.

Off-road equipment fuel consumption is based on the mix of construction equipment and duration utilizing the CalEEMod inputs for the following:

- Number of pieces of equipment
- Duration of Use (days and hours per day)
- Operating Load Factor
- Fuel Type (gasoline, diesel or electric)
- Fuel consumption factors in terms of gallons per hour of diesel for off-road equipment were calculated using a factor of 0.054 gallons per brake horsepower hour (gal/bhp-hr).[66]

Fuel consumption for worker, vendor, and haul construction vehicles are also calculated based on CalEEMod inputs. The fuel consumption rates (miles per gallons) were obtained using the ARB EMFAC2021 Web Tool.[67] The rates were based on the County-specific inventory for the initial construction year and calculated for the vehicle categories for each vehicle type in CalEEMod. For workers, the assumed fleet is based on field observations and is 25 percent LDA, 50 percent light-duty truck type 1 (LDT1), and 25 percent light-duty truck type 2 (LDT2). Worker passenger vehicles are assumed to be gasoline fueled. Haul trucks were assumed to be 100 percent diesel HHDT. Vendor trucks during building construction were assumed to be entirely diesel-fueled and 50 percent MHDT and HHDT, while asphalt vendor trucks were assumed to all be diesel-fueled HHDT.

8.1.2 - Operation

Mobile Sources

Fuel consumption factors for operational mobile sources were calculated based on the VMT and operational fleet for each land use modeled in CalEEMod. The EMFAC WebTool was used to develop

[66] California Air Resources Board (ARB). 2021. Low Emission Diesel (LED) Study: Biodiesel and Renewable Diesel Emissions in Legacy and New Technology Diesel Engines. November 2021.

[67] California Air Resources Board (ARB). 2023. EMFAC Web Tool. Website: https://arb.ca.gov/emfac/emissions-inventory. Accessed April 17, 2025.

fuel consumption rates corresponding to the County fleet for the operational year modeled in CalEEMod. These up-to-date inventories include electric and conventional vehicle inventory data as well as CNG bus and truck data. Electric usage was characterized as kWh/vehicle-mile and fossil fuel usage by miles per gallon (mpg). CNG usage is reported in gallons equivalent.

Building Energy

Natural gas and electricity estimates are based on CalEEMod Energy Calculations and included but Title 24 and Non-Title 24 energy based on size, land use and Electricity Demand Forecast Zone (EDFZ) climate zone. CalEEMod Energy Calculations are based on 2019 Title 24, providing somewhat conservative estimates of building energy use.[68]

For this project, which is all-electric, the natural gas usage was zeroed out in CalEEMod. Electrification will reduce direct on-site emissions associated with natural gas and will reduce indirect GHG emissions (assuming the electricity is procured from a higher percentage of renewable sources). It is expected that the user's building would electrify the most common natural gas end uses—space heating, water heating, and range (i.e., cooktop plus oven). Additional natural gas end uses include dryer, auxiliary heat, pool heat, spa heat, solar water heater with natural gas backup, and miscellaneous. These increased electricity demands are revised following calculational methods outlined in the CAPCOA Handbook–Measure E-15 (Require All Electric Development).[69] The detailed energy calculation sheets are included as Appendix A.

Stationary Sources

The proposed project is anticipated to include six backup diesel generators for emergency power throughout Buildings 1, 2, 3, and 4.

8.2 - Energy Analysis

The approach to analysis for energy use is based on the CEQA Guidelines Appendix F (Energy Conservation) which is focused on energy conservation through the efficient use of energy resources. Estimates of energy consumption associated with the proposed project are based, in part, on information provided by the CalEEMod output included in Appendix A, according to the Methodology outlined in Section 5. Assumptions for construction and operations used to determine energy consumption are consistent with those used to determine Air Quality and Greenhouse Gas Impacts. The proposed project is assessed for whether the project would conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

[68] California Air Pollution Control Officers Association (CAPCOA). 2021. Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity. Final Draft. December.

[69] Ibid.

8.2.1 - CEQA Guidelines

The CEQA Guidelines define a significant effect on the environment as "a substantial, or potentially substantial, adverse change in the environment." To determine whether a project would have a significant impact on energy, the type, level, and impact of emissions generated by the proposed project must be evaluated.

The following energy significance thresholds are contained in Appendix G of the CEQA Guidelines. A significant impact would occur if the proposed project would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
- Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

ENER-1:	**The proposed project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during construction or operation.**

A discussion of the proposed project's anticipated energy usage is presented below. PG&E provides electricity service to the proposed project site. Energy use consumed by the proposed project was estimated and includes electricity and fuel consumption for project construction and operation. Energy calculations are included as part of Appendix A.

Construction

The proposed project would require site preparation, grading, building construction, architectural coating, and paving, in addition to roadway and frontage improvements on all sides of the facility. The construction phase would require energy for the manufacture and transportation of building materials, preparation of the site (e.g., site clearing and grading), and the actual construction of the building. Petroleum-based fuels, such as diesel fuel and gasoline, would be the primary sources of energy for these tasks.

The types of on-site equipment used during construction of the proposed project could include gasoline- and diesel-powered construction and transportation equipment, including trucks, excavators, forklifts, and pavers. Construction equipment is estimated to consume a total of 120,602 gallons of diesel fuel over the entire construction duration (Appendix A).

Fuel use associated with construction vehicle trips generated by the proposed project was also estimated; trips include construction worker trips, haul truck trips for material transport, on-site trucks, and vendor trips for construction material deliveries. Fuel use from these vehicles traveling to the project site was based on (1) the projected number of trips the proposed project would generate during construction, (2) average trip distances by trip type, and (3) fuel efficiencies estimated in the ARB EMFAC mobile source emission model. The specific parameters used to estimate fuel usage are included in Appendix A. In total, the proposed project is estimated to generate 3,476,056 VMT and

195,569 gallons of combined gasoline and diesel for worker and vendor vehicle travel during construction.

The overall construction schedule and process is designed to be efficient in order to avoid excess monetary costs. For example, equipment and fuel are not typically used wastefully due to the added expense associated with renting the equipment, maintaining it, and fueling it. Therefore, the opportunities for future efficiency gains during construction are limited. Compliance with regulations such as the In-use Off-Road ATCM minimizes emissions by using a modern fleet, keeping equipment well-tuned and limiting idling to 5 minutes or less. Thus, it is anticipated that the construction phase of the proposed project would not result in wasteful, inefficient, and unnecessary consumption of energy.

Operation

The proposed project would consume energy as part of building operations and transportation activities. Project energy consumption is summarized in Table 25, and Table 26.

Table 25: Operational Energy Consumption–Without Air Pollutant and GHG Reduction Measures

Energy Consumption Activity	Annual Consumption
Operation Vehicle Fuel Consumption	1,246,074 gallons of gasoline
	4,543,817 gallons of diesel
	84,696 gallons of compressed natural gas (CNG)
	1,871,356 kWh of electricity
Transport Refrigeration Unit Fuel Consumption	42,116 gallons of diesel
	0 kWh of electricity
Building Energy Consumption	25,598,975 kWh of electricity
	0 kBTU of natural gas
Notes: kWh = kilowatt hour, kBTU = kilo-British Thermal Unit Source: Appendix A.	

Table 26: Operational Energy Consumption–With Air Pollutant and GHG Reduction Measures

Energy Consumption Activity	Annual Consumption
Operation Vehicle Fuel Consumption	1,246,074 gallons of gasoline
	4,543,817 gallons of diesel

Energy Consumption Activity	Annual Consumption
	84,696 gallons of compressed natural gas (CNG)
	1,871,356 kWh of electricity
Transport Refrigeration Unit Fuel Consumption	15,506 gallons of diesel
	290,963 kWh of electricity
Building Energy Consumption	25,598,975 kWh of electricity
	0 kBTU of natural gas

Notes:
kWh = kilowatt hour, kBTU = kilo-British Thermal Unit
Source: Appendix A.
This assumes the proposed project would offset all building electricity use by installing on-site solar or by procuring 100% renewable energy from the local utility provider, and assumes reductions from TRU idling-reduction and plug-in measures.

Considering the guidance provided by Appendix F of the CEQA Guidelines, a project would be considered to result in wasteful, inefficient, or unnecessary consumption of energy resources if it would conflict with the following energy conservation goals:

- Decreasing overall per capita energy consumption;
- Decreasing reliance on fossil fuels such as coal, natural gas, or oil; and
- Increasing reliance on renewable energy sources.

Decreasing Overall Per Capita Energy Consumption

The proposed project's buildings would be designed and constructed in accordance with CALGreen energy efficiency standards of Title 24. Title 24 standards include a broad set of energy conservation requirements that apply to the structural, mechanical, electrical, and plumbing systems in a building. For example, the Title 24 Lighting Power Density requirements define the maximum wattage of lighting that can be used in a building based on its square footage. Title 24 standards, widely regarded as the most advanced energy efficiency standards, would help to reduce the amount of energy required for lighting, water heating, and heating and air conditioning in buildings and would promote energy conservation. Moreover, the proposed project would use energy-efficient appliance models and systems whenever possible. Therefore, the proposed project would be consistent with this criterion. The decreasing reliance on fossil fuels and increasing use of renewable energy discussed below would also reduce per capita energy consumption for the proposed project.

Decreasing Reliance on Fossil Fuels

The proposed project would incorporate elements from CALGreen, which would include water efficient landscaping, heat reflecting roof membranes, and roofing structures to support the installation of solar panels. These project design features would reduce the amount of electricity used by the proposed project during operation and, consequently, the amount of fossil fuels needed to generate power to meet

this demand. For example, low water demand landscaping would reduce the amount of water that would need to be conveyed to the project site. Furthermore, the proposed project would be all-electric in design and would not rely on natural gas and thus would have decreasing reliance on fossil fuel.

Increasing Reliance on Renewable Energy Sources

MM GHG-1 would require the proposed project to include the installation of EV charging infrastructure beyond mandatory measures which would accelerate the region's and proposed project's adoption of EVs and allow the future transportation energy supply necessary for residents, employees, and visitors to be substituted with renewable energy sources. In addition, implementation of MM AIR-1, MM AIR-2, MM AIR-3, MM GHG-1, MM GHG-2, and MM GHG-3 would further serve to reduce fuel use and would require the proposed project to provide for 100 percent of electricity needs from on-site solar or the equivalent. As such, the proposed project would facilitate a greater dependence on renewable energy sources for building and transportation energy demands. Therefore, the proposed project would be consistent with this criterion.

Overall

As discussed above, the proposed project's energy consumption would not result in the wasteful, inefficient, or unnecessary consumption of energy resources, consistent with the guidance derived from Appendix F of the CEQA Guidelines.

ENER-2:	**The proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency.**

The proposed buildings would be compliant with Title 24 standards and would adhere to applicable energy efficiency, water efficiency, and material conservation requirements. Additionally, the proposed project would provide bicycle parking spaces and clean air vehicle parking spaces with EV charging facilities as required by Title 24. Therefore, the proposed project would be consistent with all applicable energy policies and plans.

At the time of this writing, Kern County does not have an adopted Energy Plan. Kern County does have an Energy Element in the Kern County General Plan but focuses primarily on the County's energy resources and municipal measures such as encouraging the County to seek State and federal energy grants, have discussions with various energy industries, and developing long-term compensation for wildlife habitat to name a few.

Although the proposed project is within the jurisdictional boundaries of the Metropolitan Bakersfield General Plan, thereby superseding the provisions set forth in the Kern County General Plan, the proposed project design nonetheless conforms to, and operation would comply with, State Building Energy Efficiency Standards, appliance efficiency regulations, and green building standards. Conformance to the State requirements would substantially reduce the energy consumption from fossil fuels and shift consumption to renewable sources.

The proposed project would be served with electricity provided by PG&E. In 2023, PG&E obtained 33 percent of its electricity from renewable energy sources, and 100 percent of its electricity from zero-emission sources including large hydroelectric and nuclear.[70] PG&E also offers a 50 percent and 100 percent solar choice that sources 65.5 and 100 percent of its power mix from eligible renewable energy sources respectively, as well as a Green Saver option that sources 100 percent of its power mix from eligible renewable energy sources[71]. The utility would be required to meet the future objective of 60 percent of electricity from renewable energy sources by 2030. The proposed warehouse building would be designed in accordance with Title 24, California's Energy Efficiency Standards for Nonresidential Buildings. These standards include minimum energy efficiency requirements related to building envelope, mechanical systems (e.g., HVAC and water heating systems), and indoor and outdoor lighting. The incorporation of the Title 24 standards into the design of the proposed project would ensure that the proposed project would not result in the use of energy in a wasteful manner.

The proposed project would comply with existing State energy standards and with energy conservation policies contained in the General Plan. As such, the proposed project would not conflict with State or local renewable or energy efficiency objectives.

The proposed project's compliance with Title 24 standards and other applicable regulations would ensure that the proposed project would not conflict with any of the General Plan energy conservation policies related to the proposed project's building, mechanical systems, or indoor and outdoor lighting.

[70] Pacific Gas and Electric Company (PG&E). 2023 Power Mix. Website: https://www.pge.com/assets/pge/docs/account/billing-and-assistance/bill-inserts/1224-power-content-label.pdf. Accessed April 25, 2025.

[71] Pacific Gas and Electric Company (PG&E). 2023 Power Mix. Website: https://www.pge.com/assets/pge/docs/account/billing-and-assistance/bill-inserts/1224-power-content-label.pdf. Accessed April 25, 2025.

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Appendix A:

Air Quality, Greenhouse Gas Emissions, and Energy Supporting Information

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Air Quality, Greenhouse Gas Emissions, and Energy Supporting Information

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Airport Commerce Center - Buildings 1 & 2 Construction Custom Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Airport Commerce Center - Buildings 1 & 2 Construction
Construction Start Date	7/6/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	18.0
Location	35.441920442950035, -119.04020275457175
County	Kern-San Joaquin
City	—
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2899
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-No Rail	450	1000sqft	11.9	450,360	68,400	0.00	—	Bldg 1/2 + Landscaping

Other Asphalt Surfaces	14.1	Acre	14.1	0.00	0.00	0.00	—	Bldg 1/2 Parking and Roadways
User Defined Recreational	6.00	User Defined Unit	6.00	0.00	0.00	0.00	—	Bldg 1/2 Detention

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	116	116	29.2	30.0	0.06	1.24	7.88	9.12	1.14	3.99	5.13	—	7,164	7,164	0.27	0.44	12.9	7,314
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.71	3.12	27.3	28.5	0.06	1.12	3.83	4.96	1.03	1.48	2.51	—	6,964	6,964	0.27	0.45	0.37	7,102
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.29	7.17	7.28	11.1	0.02	0.28	1.41	1.69	0.26	0.52	0.78	—	3,419	3,419	0.08	0.23	2.71	3,491
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.33	1.31	1.33	2.03	< 0.005	0.05	0.26	0.31	0.05	0.10	0.14	—	566	566	0.01	0.04	0.45	578

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.83	3.22	29.2	30.0	0.06	1.24	7.88	9.12	1.14	3.99	5.13	—	6,863	6,863	0.27	0.06	0.87	6,889
2027	116	116	12.6	25.8	0.04	0.37	2.97	3.34	0.34	0.72	1.07	—	7,164	7,164	0.15	0.44	12.9	7,314
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.71	3.12	27.3	28.5	0.06	1.12	3.83	4.96	1.03	1.48	2.51	—	6,964	6,964	0.27	0.45	0.37	7,102
2027	2.04	1.79	12.9	22.0	0.04	0.37	2.97	3.34	0.34	0.72	1.07	—	6,867	6,867	0.16	0.45	0.33	7,005
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.05	0.88	7.28	9.22	0.02	0.28	1.41	1.69	0.26	0.52	0.78	—	2,359	2,359	0.07	0.09	1.14	2,388
2027	7.29	7.17	6.42	11.1	0.02	0.19	1.41	1.59	0.17	0.34	0.52	—	3,419	3,419	0.08	0.23	2.71	3,491
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.19	0.16	1.33	1.68	< 0.005	0.05	0.26	0.31	0.05	0.10	0.14	—	391	391	0.01	0.01	0.19	395
2027	1.33	1.31	1.17	2.03	< 0.005	0.03	0.26	0.29	0.03	0.06	0.09	—	566	566	0.01	0.04	0.45	578

3. Construction Emissions Details

3.1. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.74	3.14	29.2	28.8	0.05	1.24	—	1.24	1.14	—	1.14	—	5,298	5,298	0.21	0.04	—	5,316

Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.17	1.60	1.58	< 0.005	0.07	—	0.07	0.06	—	0.06	—	290	290	0.01	< 0.005	—	291
Dust From Material Movement	—	—	—	—	—	—	0.42	0.42	—	0.22	0.22	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.29	0.29	< 0.005	0.01	—	0.01	0.01	—	0.01	—	48.1	48.1	< 0.005	< 0.005	—	48.2
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	1.21	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	231	231	< 0.005	0.01	0.76	234

Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.5	11.5	< 0.005	< 0.005	0.02	11.7
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.91	1.91	< 0.005	< 0.005	< 0.005	1.94
Vendor	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	0.00
Hauling	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	0.00

3.3. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.62	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	—
Onsite truck	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.62	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.45	0.38	3.36	3.40	0.01	0.14	—	0.14	0.13	—	0.13	—	814	814	0.03	0.01	—	816
Dust From Material Movement	—	—	—	—	—	—	0.44	0.44	—	0.18	0.18	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.61	0.62	< 0.005	0.03	—	0.03	0.02	—	0.02	—	135	135	0.01	< 0.005	—	135
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.07	1.39	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	264	264	< 0.005	0.01	0.87	268
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.09	0.95	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	232	232	< 0.005	0.01	0.02	235
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	29.7	29.7	< 0.005	< 0.005	0.05	30.1
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.91	4.91	< 0.005	< 0.005	0.01	4.98
Vendor	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	0.00
Hauling	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	0.00

	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.18	1.70	2.23	< 0.005	0.07	—	0.07	0.06	—	0.06	—	413	413	0.02	< 0.005	—	414
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.31	0.41	< 0.005	0.01	—	0.01	0.01	—	0.01	—	68.3	68.3	< 0.005	< 0.005	—	68.6
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.82	0.72	0.87	8.97	0.00	0.00	2.31	2.31	0.00	0.54	0.54	—	2,190	2,190	0.04	0.09	0.21	2,218
Vendor	0.10	0.07	2.83	0.88	0.02	0.03	0.66	0.69	0.03	0.18	0.22	—	2,377	2,377	0.03	0.34	0.16	2,479
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.14	0.13	0.14	1.69	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	392	392	0.01	0.02	0.61	397
Vendor	0.02	0.01	0.48	0.15	< 0.005	0.01	0.11	0.12	0.01	0.03	0.04	—	409	409	< 0.005	0.06	0.46	427
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.31	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	64.9	64.9	< 0.005	< 0.005	0.10	65.8
Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	67.7	67.7	< 0.005	0.01	0.08	70.7
Hauling	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	0.00

3.7. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.56	0.47	4.26	5.87	0.01	0.15	—	0.15	0.14	—	0.14	—	1,088	1,088	0.04	0.01	—	1,092
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.78	1.07	< 0.005	0.03	—	0.03	0.03	—	0.03	—	180	180	0.01	< 0.005	—	181
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.79	0.77	0.63	12.1	0.00	0.00	2.31	2.31	0.00	0.54	0.54	—	2,446	2,446	0.03	0.08	7.39	2,479
Vendor	0.10	0.08	2.55	0.81	0.02	0.03	0.66	0.69	0.03	0.18	0.22	—	2,321	2,321	0.03	0.34	5.53	2,429
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.71	0.69	0.79	8.24	0.00	0.00	2.31	2.31	0.00	0.54	0.54	—	2,147	2,147	0.04	0.09	0.19	2,174
Vendor	0.10	0.07	2.72	0.84	0.02	0.03	0.66	0.69	0.03	0.18	0.22	—	2,323	2,323	0.03	0.34	0.14	2,426
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32	0.32	0.32	4.09	0.00	0.00	1.04	1.04	0.00	0.24	0.24	—	1,012	1,012	0.02	0.04	1.45	1,026
Vendor	0.04	0.03	1.21	0.38	0.01	0.02	0.30	0.31	0.02	0.08	0.10	—	1,054	1,054	0.01	0.15	1.08	1,102
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.75	0.00	0.00	0.19	0.19	0.00	0.04	0.04	—	168	168	< 0.005	0.01	0.24	170
Vendor	0.01	0.01	0.22	0.07	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	175	175	< 0.005	0.03	0.18	182

Hauling	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	0.00

3.9. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.94	9.95	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	1.85	1.85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.38	0.55	< 0.005	0.02	—	0.02	0.02	—	0.02	—	82.8	82.8	< 0.005	< 0.005	—	83.1
Paving	0.10	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.7	13.7	< 0.005	< 0.005	—	13.8
Paving	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.96	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	194	194	< 0.005	0.01	0.59	197
Vendor	0.12	0.07	3.40	1.02	0.02	0.05	0.70	0.75	0.05	0.19	0.24	—	2,547	2,547	0.03	0.40	5.60	2,673
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.69	9.69	< 0.005	< 0.005	0.01	9.82
Vendor	0.01	< 0.005	0.19	0.06	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	140	140	< 0.005	0.02	0.13	146
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.60	1.60	< 0.005	< 0.005	< 0.005	1.63
Hauling	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	0.00

3.11. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	113	113	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.32	7.32	< 0.005	< 0.005	—	7.34
Architectural Coatings	6.19	6.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.21	1.21	< 0.005	< 0.005	—	1.22
Architectural Coatings	1.13	1.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.13	2.42	0.00	0.00	0.46	0.46	0.00	0.11	0.11	—	489	489	0.01	0.02	1.48	496
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	24.4	24.4	< 0.005	< 0.005	0.03	24.8
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.05	4.05	< 0.005	< 0.005	0.01	4.10
Vendor	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	0.00
Hauling	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	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	7/6/2026	7/31/2026	5.00	20.0	—
Grading	Grading	8/3/2026	10/2/2026	5.00	45.0	—
Building Construction	Building Construction	10/5/2026	8/20/2027	5.00	230	—
Paving	Paving	8/23/2027	9/17/2027	5.00	20.0	—
Architectural Coating	Architectural Coating	8/23/2027	9/17/2027	5.00	20.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36

Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Grading	—	—	—	—
Grading	Worker	20.0	17.3	LDA,LDT1,LDT2
Grading	Vendor	—	10.6	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	189	17.3	LDA,LDT1,LDT2
Building Construction	Vendor	73.8	10.6	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	17.3	LDA,LDT1,LDT2
Paving	Vendor	71.0	10.6	HHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	37.8	17.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.6	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—

Site Preparation	Worker	17.5	17.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.6	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	675,540	225,180	36,852

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	0.00	30.0	0.00	—
Grading	0.00	0.00	135	0.00	—
Paving	0.00	0.00	0.00	0.00	14.1

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied		PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

	Area Paved (acres)	% Asphalt
Unrefrigerated Warehouse-No Rail	0.00	0%
Other Asphalt Surfaces	14.1	100%
User Defined Recreational	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005

8. User Changes to Default Data

Screen	Justification
Land Use	Bldg 1&2 Combined SF = 257,580 SF + 192,780 SF = 450,360 SF = 10.3 Acres Detention Area = 259,477 SF = 6.0 Acres Parking/Landscaping (90%/10%) = 14.1 Acres / 1.57 Acres Total Bldge Site Area = 32 Acres
Construction: Construction Phases	Applicant Schedule (July 2026- Sept 2027) Durations based on CalEEMod defaults based on acreage.
Construction: Off-Road Equipment	—
Operations: Vehicle Data	—
Operations: Fleet Mix	—
Operations: Energy Use	—
Construction: Dust From Material Movement	—
Construction: Trips and VMT	Added Vendor Trips for Asphalt Delivery

Airport Commerce Center - Retail Construction Custom Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Airport Commerce Center - Retail Construction
Construction Start Date	12/1/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	18.0
Location	35.441920442950035, -119.04020275457175
County	Kern-San Joaquin
City	—
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2899
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Fast Food Restaurant with Drive Thru	9.41	1000sqft	0.46	9,410	10,600	0.00	—	Bldg + Landscaping

Parking Lot	2.19	Acre	2.19	0.00	0.00	0.00	—	Parking/Roadways

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.64	8.47	10.2	12.1	0.02	0.36	0.41	0.70	0.33	0.10	0.37	—	2,393	2,393	0.09	0.15	2.56	2,442
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.63	8.46	14.1	15.0	0.03	0.64	2.88	3.53	0.59	1.36	1.96	—	2,805	2,805	0.11	0.15	0.07	2,816
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.97	0.84	5.40	6.38	0.01	0.19	0.06	0.23	0.18	0.02	0.19	—	1,234	1,234	0.05	0.02	0.10	1,241
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.18	0.15	0.99	1.16	< 0.005	0.03	0.01	0.04	0.03	< 0.005	0.03	—	204	204	0.01	< 0.005	0.02	205

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2026	8.64	8.47	10.2	12.1	0.02	0.36	0.41	0.70	0.33	0.10	0.37	—	2,393	2,393	0.09	0.15	2.56	2,442
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.84	1.55	14.1	15.0	0.03	0.64	2.88	3.53	0.59	1.36	1.96	—	2,805	2,805	0.11	0.03	0.01	2,816
2026	8.63	8.46	10.2	12.0	0.02	0.36	0.41	0.70	0.33	0.10	0.37	—	2,369	2,369	0.09	0.15	0.07	2,415
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.10	0.08	0.74	0.81	< 0.005	0.03	0.06	0.09	0.03	0.02	0.05	—	155	155	0.01	< 0.005	0.01	156
2026	0.97	0.84	5.40	6.38	0.01	0.19	0.04	0.23	0.18	0.01	0.19	—	1,234	1,234	0.05	0.02	0.10	1,241
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.02	0.02	0.13	0.15	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	—	25.7	25.7	< 0.005	< 0.005	< 0.005	25.9
2026	0.18	0.15	0.99	1.16	< 0.005	0.03	0.01	0.04	0.03	< 0.005	0.03	—	204	204	0.01	< 0.005	0.02	205

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.42	1.19	10.9	11.0	0.03	0.47	—	0.47	0.43	—	0.43	—	2,717	2,717	0.11	0.02	—	2,726

Dust From Material Movement	—	—	—	—	—	—	0.62	0.62	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.09	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	22.3	22.3	< 0.005	< 0.005	—	22.4
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.70	3.70	< 0.005	< 0.005	—	3.71
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.04	0.39	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	88.7	88.7	< 0.005	< 0.005	0.01	89.8

Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.76	0.76	< 0.005	< 0.005	< 0.005	0.77
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.13	0.13	< 0.005	< 0.005	< 0.005	0.13
Vendor	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	0.00
Hauling	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	0.00

3.3. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.80	1.51	14.1	14.5	0.02	0.64	—	0.64	0.59	—	0.59	—	2,455	2,455	0.10	0.02	—	2,463
Dust From Material Movement	—	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	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	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.23	0.24	< 0.005	0.01	—	0.01	0.01	—	0.01	—	40.4	40.4	< 0.005	< 0.005	—	40.5
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.68	6.68	< 0.005	< 0.005	—	6.70
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.52	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	118	118	< 0.005	< 0.005	0.01	120
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.02	2.02	< 0.005	< 0.005	< 0.005	2.05

Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.33	0.33	< 0.005	< 0.005	< 0.005	0.34
Vendor	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	0.00
Hauling	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	0.00

3.5. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.24	10.6	11.9	0.02	0.40	—	0.40	0.37	—	0.37	—	2,201	2,201	0.09	0.02	—	2,209
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.41	0.46	< 0.005	0.02	—	0.02	0.01	—	0.01	—	86.2	86.2	< 0.005	< 0.005	—	86.5
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.01	0.01	0.08	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.3	14.3	< 0.005	< 0.005	—	14.3
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.20	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	46.7	46.7	< 0.005	< 0.005	< 0.005	47.3
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	50.6	50.6	< 0.005	0.01	< 0.005	52.9
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.90	1.90	< 0.005	< 0.005	< 0.005	1.93
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.98	1.98	< 0.005	< 0.005	< 0.005	2.07
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.31	0.31	< 0.005	< 0.005	< 0.005	0.32
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.33	0.33	< 0.005	< 0.005	< 0.005	0.34
Hauling	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	0.00

	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	1.41	1.18	10.1	11.8	0.02	0.36	—	0.36	0.33	—	0.33	—	2,201	2,201	0.09	0.02	—	2,208
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	1.41	1.18	10.1	11.8	0.02	0.36	—	0.36	0.33	—	0.33	—	2,201	2,201	0.09	0.02	—	2,208
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.72	0.60	5.14	5.98	0.01	0.18	—	0.18	0.17	—	0.17	—	1,120	1,120	0.05	0.01	—	1,124
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.13	0.11	0.94	1.09	< 0.005	0.03	—	0.03	0.03	—	0.03	—	185	185	0.01	< 0.005	—	186
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.27	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	52.2	52.2	< 0.005	< 0.005	0.17	52.9
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	49.6	49.6	< 0.005	0.01	0.13	51.9
Hauling	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.19	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	45.8	45.8	< 0.005	< 0.005	< 0.005	46.3
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	49.7	49.7	< 0.005	0.01	< 0.005	51.8
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	24.2	24.2	< 0.005	< 0.005	0.04	24.5
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	25.3	25.3	< 0.005	< 0.005	0.03	26.4
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.00	4.00	< 0.005	< 0.005	0.01	4.06
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.18	4.18	< 0.005	< 0.005	< 0.005	4.37
Hauling	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	0.00

3.9. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.79	0.67	5.88	8.19	0.01	0.25	—	0.25	0.23	—	0.23	—	1,244	1,244	0.05	0.01	—	1,248
Paving	0.57	0.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.79	0.67	5.88	8.19	0.01	0.25	—	0.25	0.23	—	0.23	—	1,244	1,244	0.05	0.01	—	1,248
Paving	0.57	0.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	—	34.1	34.1	< 0.005	< 0.005	—	34.2
Paving	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.64	5.64	< 0.005	< 0.005	—	5.66
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	1.04	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	198	198	< 0.005	0.01	0.65	201
Vendor	0.04	0.02	1.08	0.32	0.01	0.02	0.22	0.23	0.02	0.06	0.07	—	808	808	0.01	0.13	1.87	849
Hauling	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.07	0.71	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	174	174	< 0.005	0.01	0.02	176
Vendor	0.04	0.02	1.15	0.33	0.01	0.02	0.22	0.23	0.02	0.06	0.07	—	809	809	0.01	0.13	0.05	848
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.94	4.94	< 0.005	< 0.005	0.01	5.01
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.1	22.1	< 0.005	< 0.005	0.02	23.2
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.82	0.82	< 0.005	< 0.005	< 0.005	0.83
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.67	3.67	< 0.005	< 0.005	< 0.005	3.85
Hauling	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	0.00

3.11. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E			BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	7.02	7.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	7.02	7.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.66	3.66	< 0.005	< 0.005	—	3.67
Architectural Coatings	0.19	0.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.61	0.61	< 0.005	< 0.005	—	0.61
Architectural Coatings	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.4	10.4	< 0.005	< 0.005	0.03	10.6
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.15	9.15	< 0.005	< 0.005	< 0.005	9.27
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.26	0.26	< 0.005	< 0.005	< 0.005	0.26
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.04
Vendor	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	0.00
Hauling	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	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4		CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	12/1/2025	12/3/2025	5.00	3.00	—
Grading	Grading	12/4/2025	12/11/2025	5.00	6.00	—
Building Construction	Building Construction	12/12/2025	9/17/2026	5.00	200	—
Paving	Paving	9/18/2026	10/1/2026	5.00	10.0	—
Architectural Coating	Architectural Coating	9/18/2026	10/1/2026	5.00	10.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Scrapers	Diesel	Average	1.00	8.00	423	0.48
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	2.00	7.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42

Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Grading	—	—	—	—
Grading	Worker	10.0	17.3	LDA,LDT1,LDT2
Grading	Vendor	—	10.6	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	3.95	17.3	LDA,LDT1,LDT2
Building Construction	Vendor	1.54	10.6	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	17.3	LDA,LDT1,LDT2
Paving	Vendor	22.0	10.6	HHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.79	17.3	LDA,LDT1,LDT2

Architectural Coating	Vendor	—	10.6	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	17.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.6	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	14,115	4,705	5,724

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	0.00	4.50	0.00	—
Paving	0.00	0.00	0.00	0.00	2.19

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Fast Food Restaurant with Drive Thru	0.00	0%
Parking Lot	2.19	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	204	0.03	< 0.005
2026	0.00	204	0.03	< 0.005

8. User Changes to Default Data

Screen	Justification
Land Use	2 Quick Serve Restaurants (5,570 SF + 3,840 SF) Retail Combined SF = 9,410SF = 0.22 Acres Detention Area = None Parking/Landscaping (90%/10%) = 2.19 Acres / 0.24 Acres Total Bldg Site Area = 2.65 Acres
Construction: Construction Phases	Applicant Schedule (Dec 2025 - Sept 2026) Durations from CalEEMod defaults based on acreage.
Construction: Off-Road Equipment	—
Operations: Vehicle Data	—
Operations: Fleet Mix	—
Operations: Energy Use	—

Construction: Dust From Material Movement	—
Construction: Trips and VMT	Vendor trips added for asphalt delivery.

Airport Commerce Center - Building 3 Construction Custom Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Airport Commerce Center - Building 3 Construction
Construction Start Date	3/2/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	18.0
Location	35.441920442950035, -119.04020275457175
County	Kern-San Joaquin
City	—
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2899
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Manufacturing	180	1000sqft	5.00	180,360	36,900	0.00	—	Bldg 3 + Landscapi
Other Asphalt Surfaces	7.60	Acre	7.60	0.00	0.00	0.00	—	Bldg 3 Parking and Roadways

User Defined Recreational	0.73	User Defined Unit	0.73	0.00	0.00	0.00	—	Bldg 3 Detention

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	51.8	51.7	25.6	28.6	0.06	1.04	3.83	4.88	0.96	1.48	2.44	—	6,857	6,857	0.27	0.23	5.17	6,883
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.70	3.12	28.0	29.0	0.06	1.17	7.88	9.05	1.08	3.99	5.07	—	6,825	6,825	0.27	0.23	0.13	6,851
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.86	2.82	8.13	11.4	0.02	0.29	1.11	1.40	0.27	0.37	0.64	—	2,777	2,777	0.09	0.10	1.13	2,810
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.52	0.51	1.48	2.08	< 0.005	0.05	0.20	0.25	0.05	0.07	0.12	—	460	460	0.01	0.02	0.19	465

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	3.59	3.03	25.6	28.6	0.06	1.04	3.83	4.88	0.96	1.48	2.44	—	6,857	6,857	0.27	0.19	5.17	6,883
2028	51.8	51.7	8.50	11.4	0.02	0.28	0.57	0.85	0.26	0.15	0.41	—	3,065	3,065	0.08	0.23	3.35	3,139
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	3.70	3.12	28.0	29.0	0.06	1.17	7.88	9.05	1.08	3.99	5.07	—	6,825	6,825	0.27	0.19	0.13	6,851
2028	1.92	1.76	10.3	16.3	0.03	0.31	1.19	1.50	0.29	0.29	0.58	—	4,147	4,147	0.12	0.23	0.12	4,207
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.16	0.99	8.13	11.4	0.02	0.29	1.11	1.40	0.27	0.37	0.64	—	2,777	2,777	0.09	0.10	1.13	2,810
2028	2.86	2.82	1.91	2.97	0.01	0.06	0.20	0.26	0.05	0.05	0.10	—	755	755	0.02	0.04	0.36	767
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.21	0.18	1.48	2.08	< 0.005	0.05	0.20	0.25	0.05	0.07	0.12	—	460	460	0.01	0.02	0.19	465
2028	0.52	0.51	0.35	0.54	< 0.005	0.01	0.04	0.05	0.01	0.01	0.02	—	125	125	< 0.005	0.01	0.06	127

3. Construction Emissions Details

3.1. Site Preparation (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E			BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	3.63	3.05	28.0	28.3	0.05	1.17	—	1.17	1.08	—	1.08	—	5,298	5,298	0.21	0.04	—	5,316
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.77	0.77	< 0.005	0.03	—	0.03	0.03	—	0.03	—	145	145	0.01	< 0.005	—	146
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.76	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	199	199	< 0.005	0.01	0.02	201
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.65	5.65	< 0.005	< 0.005	0.01	5.73
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.94	0.94	< 0.005	< 0.005	< 0.005	0.95
Vendor	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	0.00
Hauling	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	0.00

3.3. Grading (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E			BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.51	2.95	25.6	27.3	0.06	1.04	—	1.04	0.96	—	0.96	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	—

Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.51	2.95	25.6	27.3	0.06	1.04	—	1.04	0.96	—	0.96	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.24	2.10	2.24	0.01	0.09	—	0.09	0.08	—	0.08	—	542	542	0.02	< 0.005	—	544
Dust From Material Movement	—	—	—	—	—	—	0.30	0.30	—	0.12	0.12	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.38	0.41	< 0.005	0.02	—	0.02	0.01	—	0.01	—	89.8	89.8	< 0.005	< 0.005	—	90.1
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	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	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	1.28	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	259	259	< 0.005	0.01	0.78	262
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	0.87	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	227	227	< 0.005	0.01	0.02	230
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	19.4	19.4	< 0.005	< 0.005	0.03	19.6
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.25
Vendor	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	0.00

3.5. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.60	0.50	4.59	6.33	0.01	0.16	—	0.16	0.15	—	0.15	—	1,173	1,173	0.05	0.01	—	1,177
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.84	1.16	< 0.005	0.03	—	0.03	0.03	—	0.03	—	194	194	0.01	< 0.005	—	195
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.31	0.25	4.84	0.00	0.00	0.93	0.93	0.00	0.22	0.22	—	980	980	0.01	0.03	2.96	993
Vendor	0.04	0.03	1.02	0.32	0.01	0.01	0.26	0.28	0.01	0.07	0.09	—	930	930	0.01	0.14	2.21	973
Hauling	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.28	0.32	3.30	0.00	0.00	0.93	0.93	0.00	0.22	0.22	—	860	860	0.02	0.04	0.08	871
Vendor	0.04	0.03	1.09	0.34	0.01	0.01	0.26	0.28	0.01	0.07	0.09	—	930	930	0.01	0.14	0.06	971
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.14	0.14	1.77	0.00	0.00	0.45	0.45	0.00	0.10	0.10	—	437	437	0.01	0.02	0.62	443
Vendor	0.02	0.01	0.52	0.16	< 0.005	0.01	0.13	0.13	0.01	0.04	0.04	—	455	455	< 0.005	0.07	0.47	475
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.32	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	72.3	72.3	< 0.005	< 0.005	0.10	73.3
Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	75.3	75.3	< 0.005	0.01	0.08	78.7
Hauling	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	0.00

3.7. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	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	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.14	1.22	1.77	< 0.005	0.04	—	0.04	0.04	—	0.04	—	328	328	0.01	< 0.005	—	330
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.22	0.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	54.4	54.4	< 0.005	< 0.005	—	54.6
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.23	0.28	3.07	0.00	0.00	0.93	0.93	0.00	0.22	0.22	—	843	843	0.02	0.04	0.07	854
Vendor	0.04	0.02	1.05	0.32	0.01	0.01	0.26	0.28	0.01	0.07	0.09	—	906	906	0.01	0.14	0.05	947
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.46	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	120	120	< 0.005	< 0.005	0.16	122
Vendor	0.01	< 0.005	0.14	0.04	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	124	124	< 0.005	0.02	0.12	130
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	19.9	19.9	< 0.005	< 0.005	0.03	20.1
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	20.5	20.5	< 0.005	< 0.005	0.02	21.5
Hauling	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	0.00

3.9. Paving (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	1.00	1.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	1.00	1.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.36	0.54	< 0.005	0.01	—	0.01	0.01	—	0.01	—	82.8	82.8	< 0.005	< 0.005	—	83.1
Paving	0.05	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.01	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.7	13.7	< 0.005	< 0.005	—	13.8
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.04	0.89	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	190	190	< 0.005	0.01	0.52	193
Vendor	0.06	0.04	1.83	0.56	0.01	0.03	0.38	0.41	0.03	0.10	0.13	—	1,364	1,364	0.02	0.21	2.83	1,430
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.06	0.61	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	167	167	< 0.005	0.01	0.01	169
Vendor	0.05	0.04	1.96	0.57	0.01	0.03	0.38	0.41	0.03	0.10	0.13	—	1,366	1,366	0.02	0.21	0.07	1,429
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Vendor	< 0.005	< 0.005	0.10	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	74.8	74.8	< 0.005	0.01	0.07	78.3
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.57	1.57	< 0.005	< 0.005	< 0.005	1.59
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.4	12.4	< 0.005	< 0.005	0.01	13.0
Hauling	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	0.00

3.11. Architectural Coating (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	51.6	51.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.58	6.58	< 0.005	< 0.005	—	6.61
Architectural Coatings	2.54	2.54	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.09	1.09	< 0.005	< 0.005	—	1.09
Architectural Coatings	0.46	0.46	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.04	0.90	0.00	0.00	0.19	0.19	0.00	0.04	0.04	—	192	192	< 0.005	0.01	0.53	195
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.64	8.64	< 0.005	< 0.005	0.01	8.75
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.43	1.43	< 0.005	< 0.005	< 0.005	1.45
Vendor	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	0.00
Hauling	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	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	3/1/2027	3/12/2027	5.00	10.0	—
Grading	Grading	3/15/2027	4/23/2027	5.00	30.0	—
Building Construction	Building Construction	4/26/2027	3/10/2028	5.00	230	—
Paving	Paving	3/13/2028	4/7/2028	5.00	20.0	—
Architectural Coating	Architectural Coating	4/10/2028	5/3/2028	5.00	18.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37

Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Grading	—	—	—	—
Grading	Worker	20.0	17.3	LDA,LDT1,LDT2
Grading	Vendor	—	10.6	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	75.8	17.3	LDA,LDT1,LDT2
Building Construction	Vendor	29.6	10.6	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Vendor	39.0	10.6	HHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	15.2	17.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.6	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT

Architectural Coating	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	17.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.6	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	270,540	90,180	19,863

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	0.00	15.0	0.00	—
Grading	0.00	0.00	90.0	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Manufacturing	0.00	0%
Other Asphalt Surfaces	7.60	100%
User Defined Recreational	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	0.00	204	0.03	< 0.005
2028	0.00	204	0.03	< 0.005

8. User Changes to Default Data

Screen	Justification
Land Use	Bldg 3 SF = 180,360 SF = 4.14 Acres Detention Area = 31,728 SF = 0.73 Acres Parking/Landscaping (90%/10%) = 7.6 Acres / 0.85 Acres Total Bldg Site Area = 13.3 Acres
Construction: Construction Phases	Applicant Schedule (March 2027 - May 2028) Durations from CalEEMod defaults based on acreage.
Construction: Off-Road Equipment	—
Operations: Vehicle Data	—
Operations: Fleet Mix	—
Operations: Energy Use	—
Construction: Dust From Material Movement	—

Construction: Trips and VMT	Vendor trips added for asphalt delivery.

Airport Commerce Center - Building 4 Construction Custom Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Airport Commerce Center - Building 4 Construction
Construction Start Date	3/2/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	18.0
Location	35.441920442950035, -119.04020275457175
County	Kern-San Joaquin
City	—
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2899
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Refrigerated Warehouse-No Rail	24.0	1000sqft	24.0	874,720	169,200	0.00	—	Bldg 4 + Landscaping

Other Asphalt Surfaces	35.0	Acre	35.0	0.00	0.00	0.00	—	Bldg 4 Parking and Roadways
User Defined Recreational	3.07	User Defined Unit	3.07	0.00	0.00	0.00	—	Bldg 4 Detention

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	227	227	54.6	57.9	0.12	2.24	7.88	9.91	2.06	3.99	5.13	—	13,725	13,725	0.54	0.86	28.0	13,778
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.96	3.36	29.2	39.7	0.07	1.24	7.88	9.12	1.14	3.99	5.13	—	12,851	12,851	0.29	0.87	0.73	13,118
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	14.1	13.9	22.3	27.3	0.05	0.86	4.12	4.98	0.79	1.50	2.29	—	7,109	7,109	0.23	0.38	4.46	7,191
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.57	2.53	4.07	4.98	0.01	0.16	0.75	0.91	0.14	0.27	0.42	—	1,177	1,177	0.04	0.06	0.74	1,191

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	7.44	6.26	54.6	57.9	0.12	2.24	7.88	9.91	2.06	3.99	5.13	—	13,725	13,725	0.54	0.86	28.0	13,778
2027	227	227	22.0	45.5	0.07	0.63	5.77	6.40	0.59	1.40	1.99	—	13,240	13,240	0.27	0.86	25.1	13,528
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.96	3.36	29.2	39.7	0.07	1.24	7.88	9.12	1.14	3.99	5.13	—	12,851	12,851	0.29	0.87	0.73	13,118
2027	3.67	3.23	22.6	38.1	0.07	0.63	5.77	6.40	0.59	1.40	1.99	—	12,663	12,663	0.28	0.87	0.65	12,929
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.21	2.71	22.3	27.3	0.05	0.86	4.12	4.98	0.79	1.50	2.29	—	7,109	7,109	0.23	0.25	3.13	7,191
2027	14.1	13.9	9.90	16.7	0.03	0.29	2.29	2.58	0.27	0.56	0.83	—	5,423	5,423	0.12	0.38	4.46	5,543
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.59	0.49	4.07	4.98	0.01	0.16	0.75	0.91	0.14	0.27	0.42	—	1,177	1,177	0.04	0.04	0.52	1,191
2027	2.57	2.53	1.81	3.05	0.01	0.05	0.42	0.47	0.05	0.10	0.15	—	898	898	0.02	0.06	0.74	918

	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.74	3.14	29.2	28.8	0.05	1.24	—	1.24	1.14	—	1.14	—	5,298	5,298	0.21	0.04	—	5,316

Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.74	3.14	29.2	28.8	0.05	1.24	—	1.24	1.14	—	1.14	—	5,298	5,298	0.21	0.04	—	5,316
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	0.34	3.20	3.16	0.01	0.14	—	0.14	0.13	—	0.13	—	581	581	0.02	< 0.005	—	583
Dust From Material Movement	—	—	—	—	—	—	0.84	0.84	—	0.43	0.43	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.58	0.58	< 0.005	0.02	—	0.02	0.02	—	0.02	—	96.1	96.1	< 0.005	< 0.005	—	96.5

Dust From Material Movement	—	—	—	—	—	—	0.15	0.15	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	1.21	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	231	231	< 0.005	0.01	0.76	234
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	0.83	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	203	203	< 0.005	0.01	0.02	205
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	23.1	23.1	< 0.005	< 0.005	0.04	23.4
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.82	3.82	< 0.005	< 0.005	0.01	3.87
Vendor	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	0.00
Hauling	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	0.00

3.3. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.25	6.09	54.5	55.1	0.12	2.24	—	2.24	2.06	—	2.06	—	13,197	13,197	0.54	0.11	—	13,242
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.79	1.50	13.4	13.6	0.03	0.55	—	0.55	0.51	—	0.51	—	3,254	3,254	0.13	0.03	—	3,265
Dust From Material Movement	—	—	—	—	—	—	1.77	1.77	—	0.70	0.70	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	0.27	2.45	2.48	0.01	0.10	—	0.10	0.09	—	0.09	—	539	539	0.02	< 0.005	—	541

Dust From Material Movement	—	—	—	—	—	—	0.32	0.32	—	0.13	0.13	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.17	0.15	2.78	0.00	0.00	0.49	0.49	0.00	0.11	0.11	—	528	528	0.01	0.02	1.74	535
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.51	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	119	119	< 0.005	< 0.005	0.19	120
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	19.6	19.6	< 0.005	< 0.005	0.03	19.9
Hauling	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	0.00

3.5. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.18	1.82	16.5	20.5	0.04	0.63	—	0.63	0.58	—	0.58	—	3,981	3,981	0.16	0.03	—	3,995
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.18	1.82	16.5	20.5	0.04	0.63	—	0.63	0.58	—	0.58	—	3,981	3,981	0.16	0.03	—	3,995
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.44	3.98	4.94	0.01	0.15	—	0.15	0.14	—	0.14	—	958	958	0.04	0.01	—	962
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.73	0.90	< 0.005	0.03	—	0.03	0.03	—	0.03	—	159	159	0.01	< 0.005	—	159
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	1.76	1.59	1.37	25.5	0.00	0.00	4.49	4.49	0.00	1.05	1.05	—	4,849	4,849	0.06	0.16	16.0	4,915
Vendor	0.20	0.15	5.14	1.66	0.03	0.07	1.27	1.34	0.07	0.35	0.42	—	4,612	4,612	0.05	0.66	12.0	4,822
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.59	1.41	1.69	17.4	0.00	0.00	4.49	4.49	0.00	1.05	1.05	—	4,254	4,254	0.08	0.17	0.41	4,308
Vendor	0.19	0.13	5.49	1.71	0.03	0.07	1.27	1.34	0.07	0.35	0.42	—	4,616	4,616	0.05	0.66	0.31	4,815
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.39	0.34	0.37	4.58	0.00	0.00	1.07	1.07	0.00	0.25	0.25	—	1,064	1,064	0.02	0.04	1.66	1,078
Vendor	0.05	0.03	1.29	0.40	0.01	0.02	0.30	0.32	0.02	0.08	0.10	—	1,111	1,111	0.01	0.16	1.25	1,160
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.84	0.00	0.00	0.19	0.19	0.00	0.05	0.05	—	176	176	< 0.005	0.01	0.28	179
Vendor	0.01	0.01	0.24	0.07	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	184	184	< 0.005	0.03	0.21	192
Hauling	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	0.00

3.7. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E			BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.10	1.76	15.8	20.5	0.04	0.57	—	0.57	0.52	—	0.52	—	3,981	3,981	0.16	0.03	—	3,995

Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.10	1.76	15.8	20.5	0.04	0.57	—	0.57	0.52	—	0.52	—	3,981	3,981	0.16	0.03	—	3,995
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.65	5.88	7.61	0.01	0.21	—	0.21	0.19	—	0.19	—	1,480	1,480	0.06	0.01	—	1,485
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.07	1.39	< 0.005	0.04	—	0.04	0.04	—	0.04	—	245	245	0.01	< 0.005	—	246
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.53	1.50	1.22	23.5	0.00	0.00	4.49	4.49	0.00	1.05	1.05	—	4,751	4,751	0.06	0.16	14.3	4,816
Vendor	0.20	0.15	4.95	1.58	0.03	0.07	1.27	1.34	0.07	0.35	0.42	—	4,508	4,508	0.05	0.66	10.7	4,717
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	1.38	1.34	1.54	16.0	0.00	0.00	4.49	4.49	0.00	1.05	1.05	—	4,169	4,169	0.07	0.17	0.37	4,223
Vendor	0.19	0.13	5.28	1.64	0.03	0.07	1.27	1.34	0.07	0.35	0.42	—	4,512	4,512	0.05	0.66	0.28	4,711
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.52	0.50	0.51	6.51	0.00	0.00	1.65	1.65	0.00	0.39	0.39	—	1,610	1,610	0.02	0.06	2.30	1,631
Vendor	0.07	0.05	1.92	0.60	0.01	0.02	0.47	0.49	0.02	0.13	0.15	—	1,677	1,677	0.02	0.25	1.72	1,752
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.09	1.19	0.00	0.00	0.30	0.30	0.00	0.07	0.07	—	267	267	< 0.005	0.01	0.38	270
Vendor	0.01	0.01	0.35	0.11	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	278	278	< 0.005	0.04	0.28	290
Hauling	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	0.00

3.9. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.94	9.95	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	1.67	1.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.13	0.11	1.05	1.50	< 0.005	0.04	—	0.04	0.04	—	0.04	—	228	228	0.01	< 0.005	—	228
Paving	0.25	0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.02	0.02	0.19	0.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	37.7	37.7	< 0.005	< 0.005	—	37.8
Paving	0.05	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.96	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	194	194	< 0.005	0.01	0.59	197
Vendor	0.11	0.07	3.06	0.92	0.02	0.04	0.63	0.67	0.04	0.17	0.22	—	2,296	2,296	0.02	0.36	5.05	2,410
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.6	26.6	< 0.005	< 0.005	0.04	27.0
Vendor	0.02	0.01	0.48	0.14	< 0.005	0.01	0.09	0.10	0.01	0.03	0.03	—	346	346	< 0.005	0.05	0.33	363
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.41	4.41	< 0.005	< 0.005	0.01	4.47
Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	57.3	57.3	< 0.005	0.01	0.05	60.1
Hauling	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	0.00

3.11. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	224	224	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.32	7.32	< 0.005	< 0.005	—	7.34
Architectural Coatings	12.3	12.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.21	1.21	< 0.005	< 0.005	—	1.22
Architectural Coatings	2.24	2.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.30	0.24	4.70	0.00	0.00	0.90	0.90	0.00	0.21	0.21	—	950	950	0.01	0.03	2.87	963
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.02	0.19	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	47.5	47.5	< 0.005	< 0.005	0.07	48.1
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.86	7.86	< 0.005	< 0.005	0.01	7.96
Vendor	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	0.00
Hauling	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	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	3/2/2026	4/24/2026	5.00	40.0	—
Grading	Grading	4/27/2026	8/28/2026	5.00	90.0	—
Building Construction	Building Construction	8/31/2026	7/9/2027	5.00	225	—
Paving	Paving	7/12/2027	9/24/2027	5.00	55.0	—
Architectural Coating	Architectural Coating	7/12/2027	8/6/2027	5.00	20.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	2.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	4.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37

Grading	Scrapers	Diesel	Average	4.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	4.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	2.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	2.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	4.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Grading	—	—	—	—
Grading	Worker	40.0	17.3	LDA,LDT1,LDT2
Grading	Vendor	—	10.6	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	367	17.3	LDA,LDT1,LDT2
Building Construction	Vendor	143	10.6	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	17.3	LDA,LDT1,LDT2

Paving	Vendor	64.0	10.6	HHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	73.5	17.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.6	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	17.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.6	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	1,312,080	437,360	91,476

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name		Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)

Site Preparation	0.00	0.00	60.0	0.00	—
Grading	0.00	0.00	540	0.00	—
Paving	0.00	0.00	0.00	0.00	35.0

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Refrigerated Warehouse-No Rail	0.00	0%
Other Asphalt Surfaces	35.0	100%
User Defined Recreational	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005

8. User Changes to Default Data

Screen	Justification
Land Use	Bldg 4 SF = 874,720 SF = 20 Acres Detention Area = 316,624 + 97,206 SF = = 133,830 SF = 3.07 Acres Parking/Landscaping (90%/10%) = 35 Acres / 3.88 Acres Total Bldg Site Area = 62 Acres

Construction: Construction Phases	Applicant Schedule (March 2026- Sept 2027). Durations based on CalEEMod defaults based on acreage. Site Prep and Grading Based on 34 acres x 2. Site Prep Phase Length Doubled and Eqpt retained. Grading Length 34 Acre Default and Eqpt Doubled. Bldg Construction Based on 20 Acres - Vertical Construction Phase Scaled by 75% to adjust for applicant schedule, Eqpt Adjusted by 1.33 and fractional eqpt rounded up.
Construction: Off-Road Equipment	Grading Eqpt Doubled to Account for 34 x 2 Acres Bldg Construction Duration adjusted for applicant schedule by 75%, Eqpt increased by 1.33 x with fractional pieces rounded up to next #.
Operations: Vehicle Data	—
Operations: Fleet Mix	—
Operations: Energy Use	—
Construction: Dust From Material Movement	—
Construction: Trips and VMT	Vendor trips added for Asphalt delivery.

Airport Commerce Center - Frontage Roadway Improvements Custom Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Airport Commerce Center - Frontage Roadway Improvements
Construction Start Date	3/2/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	18.0
Location	35.441920442950035, -119.04020275457175
County	Kern-San Joaquin
City	—
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2899
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Other Asphalt Surfaces	11.4	Acre	11.4	0.00	11.0	0.00	—	0

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.72	3.13	27.3	29.0	0.06	1.12	3.83	4.96	1.03	1.48	2.51	—	6,863	6,863	0.27	0.34	5.08	6,889
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.82	3.21	29.2	29.6	0.06	1.24	7.88	9.12	1.14	3.99	5.13	—	6,830	6,830	0.27	0.06	0.02	6,856
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.50	0.42	3.43	4.06	0.01	0.14	0.63	0.77	0.13	0.26	0.38	—	885	885	0.03	0.02	0.26	890
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.09	0.08	0.63	0.74	< 0.005	0.03	0.12	0.14	0.02	0.05	0.07	—	147	147	0.01	< 0.005	0.04	147

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.72	3.13	27.3	29.0	0.06	1.12	3.83	4.96	1.03	1.48	2.51	—	6,863	6,863	0.27	0.06	0.87	6,889

2027	2.53	2.35	9.72	11.7	0.03	0.34	0.74	1.08	0.31	0.20	0.51	—	3,750	3,750	0.09	0.34	5.08	3,859
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.82	3.21	29.2	29.6	0.06	1.24	7.88	9.12	1.14	3.99	5.13	—	6,830	6,830	0.27	0.06	0.02	6,856
2027	0.16	0.15	0.77	1.70	< 0.005	0.02	0.21	0.24	0.02	0.05	0.07	—	341	341	0.01	0.01	0.02	344
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.50	0.42	3.43	4.06	0.01	0.14	0.63	0.77	0.13	0.26	0.38	—	885	885	0.03	0.01	0.20	890
2027	0.21	0.20	0.90	1.46	< 0.005	0.03	0.14	0.17	0.03	0.03	0.06	—	368	368	0.01	0.02	0.26	375
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.09	0.08	0.63	0.74	< 0.005	0.03	0.12	0.14	0.02	0.05	0.07	—	147	147	0.01	< 0.005	0.03	147
2027	0.04	0.04	0.16	0.27	< 0.005	0.01	0.03	0.03	< 0.005	0.01	0.01	—	60.9	60.9	< 0.005	< 0.005	0.04	62.1

3. Construction Emissions Details

3.1. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.74	3.14	29.2	28.8	0.05	1.24	—	1.24	1.14	—	1.14	—	5,298	5,298	0.21	0.04	—	5,316

Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.80	0.79	< 0.005	0.03	—	0.03	0.03	—	0.03	—	145	145	0.01	< 0.005	—	146
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	0.83	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	203	203	< 0.005	0.01	0.02	205

Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.77	5.77	< 0.005	< 0.005	0.01	5.85
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.95	0.95	< 0.005	< 0.005	< 0.005	0.97
Vendor	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	0.00
Hauling	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	0.00

3.3. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.62	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	3.62	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.25	2.24	2.27	0.01	0.09	—	0.09	0.08	—	0.08	—	542	542	0.02	< 0.005	—	544
Dust From Material Movement	—	—	—	—	—	—	0.30	0.30	—	0.12	0.12	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.41	0.41	< 0.005	0.02	—	0.02	0.02	—	0.02	—	89.8	89.8	< 0.005	< 0.005	—	90.1
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.07	1.39	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	264	264	< 0.005	0.01	0.87	268
Vendor	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	0.00

Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.09	0.95	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	232	232	< 0.005	0.01	0.02	235
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	19.8	19.8	< 0.005	< 0.005	0.03	20.0
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.27	3.27	< 0.005	< 0.005	0.01	3.32
Vendor	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	0.00
Hauling	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	0.00

3.5. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.94	9.95	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	1.49	1.49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.38	0.55	< 0.005	0.02	—	0.02	0.02	—	0.02	—	82.8	82.8	< 0.005	< 0.005	—	83.1
Paving	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.7	13.7	< 0.005	< 0.005	—	13.8
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.96	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	194	194	< 0.005	0.01	0.59	197
Vendor	0.10	0.06	2.73	0.82	0.01	0.04	0.56	0.60	0.04	0.15	0.19	—	2,045	2,045	0.02	0.32	4.50	2,146
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.69	9.69	< 0.005	< 0.005	0.01	9.82
Vendor	0.01	< 0.005	0.16	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	112	112	< 0.005	0.02	0.11	118

Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.60	1.60	< 0.005	< 0.005	< 0.005	1.63
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	18.6	18.6	< 0.005	< 0.005	0.02	19.5
Hauling	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	0.00

3.7. Off-Site Improvements (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.71	0.94	< 0.005	0.03	—	0.03	0.02	—	0.02	—	143	143	0.01	< 0.005	—	143
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.71	0.94	< 0.005	0.03	—	0.03	0.02	—	0.02	—	143	143	0.01	< 0.005	—	143
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.35	0.46	< 0.005	0.01	—	0.01	0.01	—	0.01	—	69.6	69.6	< 0.005	< 0.005	—	69.8

Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.5	11.5	< 0.005	< 0.005	—	11.6
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	1.21	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	231	231	< 0.005	0.01	0.76	234
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	0.83	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	203	203	< 0.005	0.01	0.02	205
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.44	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	103	103	< 0.005	< 0.005	0.16	104
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.0	17.0	< 0.005	< 0.005	0.03	17.2
Vendor	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	0.00
Hauling	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	0.00

3.9. Off-Site Improvements (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.70	0.93	< 0.005	0.02	—	0.02	0.02	—	0.02	—	143	143	0.01	< 0.005	—	143
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.70	0.93	< 0.005	0.02	—	0.02	0.02	—	0.02	—	143	143	0.01	< 0.005	—	143
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.33	0.44	< 0.005	0.01	—	0.01	0.01	—	0.01	—	66.8	66.8	< 0.005	< 0.005	—	67.0
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.1	11.1	< 0.005	< 0.005	—	11.1

Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	1.12	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	226	226	< 0.005	0.01	0.68	229
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.76	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	199	199	< 0.005	0.01	0.02	201
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.39	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	96.5	96.5	< 0.005	< 0.005	0.14	97.8
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.0	16.0	< 0.005	< 0.005	0.02	16.2
Vendor	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	0.00
Hauling	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	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetati	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	3/2/2026	3/13/2026	5.00	10.0	—
Grading	Grading	3/16/2026	4/24/2026	5.00	30.0	—
Paving	Paving	8/30/2027	9/24/2027	5.00	20.0	—
Off-Site Improvements	Trenching	4/27/2026	8/27/2027	5.00	350	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38

Off-Site Improvements	Excavators	Diesel	Average	1.00	1.00	36.0	0.38
Off-Site Improvements	Skid Steer Loaders	Diesel	Average	1.00	1.00	71.0	0.37
Off-Site Improvements	Tractors/Loaders/Backhoes	Diesel	Average	1.00	1.00	84.0	0.37
Off-Site Improvements	Trenchers	Diesel	Average	1.00	1.00	40.0	0.50
Off-Site Improvements	Rollers	Diesel	Average	1.00	1.00	36.0	0.38
Off-Site Improvements	Plate Compactors	Diesel	Average	1.00	1.00	8.00	0.43
Off-Site Improvements	Pumps	Diesel	Average	1.00	1.00	11.0	0.74

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Grading	—	—	—	—
Grading	Worker	20.0	17.3	LDA,LDT1,LDT2
Grading	Vendor	—	10.6	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	17.3	LDA,LDT1,LDT2
Paving	Vendor	57.0	10.6	HHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	17.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.6	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Off-Site Improvements	—	—	—	—

Off-Site Improvements	Worker	17.5	17.3	LDA,LDT1,LDT2
Off-Site Improvements	Vendor	—	10.6	HHDT,MHDT
Off-Site Improvements	Hauling	0.00	20.0	HHDT
Off-Site Improvements	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	0.00	15.0	0.00	—
Grading	0.00	0.00	90.0	0.00	—
Paving	0.00	0.00	0.00	0.00	11.4

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Other Asphalt Surfaces	11.4	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005

8. User Changes to Default Data

Screen	Justification
Land Use	Roadway and Utility Improvements
Construction: Construction Phases	Applicant Schedule (March 2026 - Sept 2027) Durations from CalEEMod defaults based on acreage.
Construction: Off-Road Equipment	Eqpt Added to Trenching to complement paving and perform trenching, road preparation and other roadway/utility improvements.
Operations: Vehicle Data	—
Operations: Fleet Mix	—
Operations: Energy Use	—
Construction: Dust From Material Movement	—
Construction: Trips and VMT	Vendor trips added for asphalt delivery.

Airport Commerce Center - Building Operations Custom Report

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1.1. Basic Project Information

Data Field	Value
Project Name	Airport Commerce Center - Building Operations
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	18.0
Location	35.441920442950035, -119.04020275457175
County	Kern-San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2899
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.30

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-No Rail	258	1000sqft	110	257,580	878,123	0.00	—	Bldg 1 - Warehouse

Manufacturing	193	1000sqft	0.00	192,780	0.00	0.00	—	Bldg 2 - Manufacturing
Manufacturing	180	1000sqft	0.00	180,360	0.00	0.00	—	Bldg 3 - Manufacturing
Unrefrigerated Warehouse-No Rail	437	1000sqft	0.00	437,360	3.00	0.00	—	Bldg 4 - Unrefrig.Portion
Refrigerated Warehouse-No Rail	437	1000sqft	0.00	437,360	0.00	0.00	—	Bldg 5 - Refrig.Portion
Fast Food Restaurant with Drive Thru	9.41	1000sqft	0.00	9,410	0.00	0.00	—	2 QSR Combined

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	56.8	54.9	36.0	90.8	0.05	1.55	0.00	1.55	1.52	0.00	1.52	1,554	6,154	7,708	157	1.68	11,768	23,908
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	45.1	44.1	35.4	24.9	0.05	1.44	0.00	1.44	1.44	0.00	1.44	1,554	5,883	7,437	157	1.68	11,768	23,636
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	41.6	41.0	5.12	35.9	0.01	0.25	0.00	0.25	0.24	0.00	0.24	1,554	1,706	3,260	157	1.65	11,768	19,445

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.59	7.49	0.94	6.55	< 0.005	0.05	0.00	0.05	0.04	0.00	0.04	257	282	540	26.0	0.27	1,948	3,219

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	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	0.00
Area	46.1	45.2	0.55	65.9	< 0.005	0.12	—	0.12	0.09	—	0.09	—	271	271	0.01	< 0.005	—	272
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	842	842	0.00	0.00	—	842
Water	—	—	—	—	—	—	—	—	—	—	—	673	46.6	719	69.0	1.64	—	2,932
Waste	—	—	—	—	—	—	—	—	—	—	—	881	0.00	881	88.1	0.00	—	3,084
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11,768	11,768
Stationary	10.7	9.76	35.4	24.9	0.05	1.44	0.00	1.44	1.44	0.00	1.44	0.00	4,995	4,995	0.20	0.04	0.00	5,012
Total	56.8	54.9	36.0	90.8	0.05	1.55	0.00	1.55	1.52	0.00	1.52	1,554	6,154	7,708	157	1.68	11,768	23,908
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	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	0.00
Area	34.3	34.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	842	842	0.00	0.00	—	842
Water	—	—	—	—	—	—	—	—	—	—	—	673	46.6	719	69.0	1.64	—	2,932
Waste	—	—	—	—	—	—	—	—	—	—	—	881	0.00	881	88.1	0.00	—	3,084
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11,768	11,768
Stationary	10.7	9.76	35.4	24.9	0.05	1.44	0.00	1.44	1.44	0.00	1.44	0.00	4,995	4,995	0.20	0.04	0.00	5,012
Total	45.1	44.1	35.4	24.9	0.05	1.44	0.00	1.44	1.44	0.00	1.44	1,554	5,883	7,437	157	1.68	11,768	23,636

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	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	0.00
Area	40.1	39.7	0.27	32.5	< 0.005	0.06	—	0.06	0.04	—	0.04	—	134	134	0.01	< 0.005	—	134
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	842	842	0.00	0.00	—	842
Water	—	—	—	—	—	—	—	—	—	—	—	673	46.6	719	69.0	1.64	—	2,932
Waste	—	—	—	—	—	—	—	—	—	—	—	881	0.00	881	88.1	0.00	—	3,084
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11,768	11,768
Stationary	1.47	1.34	4.85	3.41	0.01	0.20	0.00	0.20	0.20	0.00	0.20	0.00	684	684	0.03	0.01	0.00	687
Total	41.6	41.0	5.12	35.9	0.01	0.25	0.00	0.25	0.24	0.00	0.24	1,554	1,706	3,260	157	1.65	11,768	19,445
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	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	0.00
Area	7.32	7.24	0.05	5.93	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.1	22.1	< 0.005	< 0.005	—	22.2
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	139	139	0.00	0.00	—	139
Water	—	—	—	—	—	—	—	—	—	—	—	111	7.71	119	11.4	0.27	—	485
Waste	—	—	—	—	—	—	—	—	—	—	—	146	0.00	146	14.6	0.00	—	511
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,948	1,948
Stationary	0.27	0.24	0.89	0.62	< 0.005	0.04	0.00	0.04	0.04	0.00	0.04	0.00	113	113	< 0.005	< 0.005	0.00	114
Total	7.59	7.49	0.94	6.55	< 0.005	0.05	0.00	0.05	0.04	0.00	0.04	257	282	540	26.0	0.27	1,948	3,219

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	254	254	0.00	0.00	—	254
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	151	151	0.00	0.00	—	151
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	422	422	0.00	0.00	—	422
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	14.0	14.0	0.00	0.00	—	14.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	842	842	0.00	0.00	—	842
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	254	254	0.00	0.00	—	254
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	151	151	0.00	0.00	—	151

Refrigerated	—	—	—	—	—	—	—	—	—	—	—	—	422	422	0.00	0.00	—	422
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	14.0	14.0	0.00	0.00	—	14.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	842	842	0.00	0.00	—	842
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	42.1	42.1	0.00	0.00	—	42.1
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	25.0	25.0	0.00	0.00	—	25.0
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	69.9	69.9	0.00	0.00	—	69.9
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	2.32	2.32	0.00	0.00	—	2.32
Total	—	—	—	—	—	—	—	—	—	—	—	—	139	139	0.00	0.00	—	139

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrig Warehouse-No Rail	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
Manufacturing	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
Refrigerated Warehouse-No Rail	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
Fast Food Restaurant with Drive Thru	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
Total	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	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
Manufacturing	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
Refrigerated Warehouse-No Rail	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
Fast Food Restaurant with Drive Thru	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
Total	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

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	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
Manufacturing	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
Refrigerated Warehouse-No Rail	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
Fast Food Restaurant with Drive Thru	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
Total	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

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	32.4	32.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.92	1.92	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landsca Equipment	11.7	10.8	0.55	65.9	< 0.005	0.12	—	0.12	0.09	—	0.09	—	271	271	0.01	< 0.005	—	272
Total	46.1	45.2	0.55	65.9	< 0.005	0.12	—	0.12	0.09	—	0.09	—	271	271	0.01	< 0.005	—	272
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	32.4	32.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.92	1.92	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	34.3	34.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	5.92	5.92	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.35	0.35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.06	0.97	0.05	5.93	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.1	22.1	< 0.005	< 0.005	—	22.2
Total	7.32	7.24	0.05	5.93	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.1	22.1	< 0.005	< 0.005	—	22.2

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	308	22.0	330	31.6	0.75	—	1,343
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	165	11.2	177	17.0	0.40	—	720
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	194	13.1	207	19.9	0.47	—	844
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	5.47	0.37	5.84	0.56	0.01	—	23.8
Total	—	—	—	—	—	—	—	—	—	—	—	673	46.6	719	69.0	1.64	—	2,932
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	308	22.0	330	31.6	0.75	—	1,343
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	165	11.2	177	17.0	0.40	—	720
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	194	13.1	207	19.9	0.47	—	844

Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	5.47	0.37	5.84	0.56	0.01	—	23.8
Total	—	—	—	—	—	—	—	—	—	—	—	673	46.6	719	69.0	1.64	—	2,932
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	51.0	3.63	54.6	5.23	0.12	—	222
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	27.4	1.85	29.2	2.81	0.07	—	119
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	32.1	2.17	34.3	3.29	0.08	—	140
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	0.91	0.06	0.97	0.09	< 0.005	—	3.95
Total	—	—	—	—	—	—	—	—	—	—	—	111	7.71	119	11.4	0.27	—	485

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrig Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	352	0.00	352	35.2	0.00	—	1,232
Manufac turing	—	—	—	—	—	—	—	—	—	—	—	249	0.00	249	24.9	0.00	—	872
Refriger ated Wareho use-No Rail	—	—	—	—	—	—	—	—	—	—	—	222	0.00	222	22.1	0.00	—	775
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	58.4	0.00	58.4	5.84	0.00	—	204
Total	—	—	—	—	—	—	—	—	—	—	—	881	0.00	881	88.1	0.00	—	3,084
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrig erated Wareho use-No Rail	—	—	—	—	—	—	—	—	—	—	—	352	0.00	352	35.2	0.00	—	1,232
Manufac turing	—	—	—	—	—	—	—	—	—	—	—	249	0.00	249	24.9	0.00	—	872
Refriger ated Wareho use-No Rail	—	—	—	—	—	—	—	—	—	—	—	222	0.00	222	22.1	0.00	—	775
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	58.4	0.00	58.4	5.84	0.00	—	204
Total	—	—	—	—	—	—	—	—	—	—	—	881	0.00	881	88.1	0.00	—	3,084

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	58.3	0.00	58.3	5.83	0.00	—	204
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	41.3	0.00	41.3	4.13	0.00	—	144
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	36.7	0.00	36.7	3.67	0.00	—	128
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	9.67	0.00	9.67	0.97	0.00	—	33.8
Total	—	—	—	—	—	—	—	—	—	—	—	146	0.00	146	14.6	0.00	—	511

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	97.1	97.1
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11,656	11,656

Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.7	14.7
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11,768	11,768
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	97.1	97.1
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11,656	11,656
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.7	14.7
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11,768	11,768
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16.1	16.1
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,930	1,930
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.44	2.44

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,948	1,948

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Emergency Generator	10.7	9.76	35.4	24.9	0.05	1.44	0.00	1.44	1.44	0.00	1.44	0.00	4,995	4,995	0.20	0.04	0.00	5,012
Total	10.7	9.76	35.4	24.9	0.05	1.44	0.00	1.44	1.44	0.00	1.44	0.00	4,995	4,995	0.20	0.04	0.00	5,012
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	10.7	9.76	35.4	24.9	0.05	1.44	0.00	1.44	1.44	0.00	1.44	0.00	4,995	4,995	0.20	0.04	0.00	5,012
Total	10.7	9.76	35.4	24.9	0.05	1.44	0.00	1.44	1.44	0.00	1.44	0.00	4,995	4,995	0.20	0.04	0.00	5,012
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.27	0.24	0.89	0.62	< 0.005	0.04	0.00	0.04	0.04	0.00	0.04	0.00	113	113	< 0.005	< 0.005	0.00	114
Total	0.27	0.24	0.89	0.62	< 0.005	0.04	0.00	0.04	0.04	0.00	0.04	0.00	113	113	< 0.005	< 0.005	0.00	114

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	2,272,275	757,425	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	2,869,651	12.0	0.0000	0.0000	0.00
Manufacturing	2,375,268	12.0	0.0000	0.0000	0.00
Manufacturing	2,222,240	12.0	0.0000	0.0000	0.00
Unrefrigerated Warehouse-No Rail	4,865,986	12.0	0.0000	0.0000	0.00
Refrigerated Warehouse-No Rail	12,840,515	12.0	0.0000	0.0000	0.00
Fast Food Restaurant with Drive Thru	425,315	12.0	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	59,565,375	14,321,891
Manufacturing	44,580,375	0.00
Manufacturing	41,708,250	0.00
Unrefrigerated Warehouse-No Rail	101,139,500	48.9
Refrigerated Warehouse-No Rail	101,139,500	0.00
Fast Food Restaurant with Drive Thru	2,856,252	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	242	—
Manufacturing	239	—
Manufacturing	224	—
Unrefrigerated Warehouse-No Rail	411	—
Refrigerated Warehouse-No Rail	411	—
Fast Food Restaurant with Drive Thru	108	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Manufacturing	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Manufacturing	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Refrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0
Fast Food Restaurant with Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant with Drive Thru	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Fast Food Restaurant with Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	5.00	2.00	100	300	0.73
Emergency Generator	Diesel	1.00	2.00	100	1,475	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

8. User Changes to Default Data

Screen	Justification
Land Use	Building Operations ONLY. Mobile Sources Modeled Separately All Landscaping and acreage included in first land use.
Construction: Construction Phases	—
Construction: Off-Road Equipment	—
Operations: Energy Use	Calculational Method is from Measure E-15 of the CAPCOA Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health.
Characteristics: Utility Information	GHG Intensity for 2028 is based on PG&E Base Plan Power Content Label for 2023 : 12 lb CO2e/MWhr

Operations: Emergency Generators and Fire Pumps	Anticipated to incorporate six emergency diesel generators across four buildings - Buildings 1, 2 and 3 would utilize one 300 hp generator per building (three total generators) and Building 4 would utilize one 1,400 hp generator and two 300 hp generators.
Operations: Generators + Pumps EF	US EPA Tier 4 Final Emission Standards considered BACT and required by SJVAPCD Rule 4702

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Airport Commerce Center - Vehicle Operations
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	18.0
Location	35.441920442950035, -119.04020275457175
County	Kern-San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2899
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Industrial	1.00	User Defined Unit	0.00	0.00	0.00	0.00	—	Warehouse/Manufacturing - Trucks

User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0.00	0.00	—	Warehouse Passenger Vehicles
User Defined Recreational	1.00	User Defined Unit	0.00	0.00	0.00	0.00	—	Retail (QSR) Passenger Vehicles

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	18.1	15.9	144	156	1.82	2.43	29.9	32.4	2.32	8.32	10.6	0.00	191,777	191,777	2.25	24.4	454	199,555
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	36.4	34.0	167	132	1.88	2.67	30.7	33.4	2.55	8.55	11.1	0.00	197,363	197,363	2.54	25.0	12.0	204,891
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	16.9	14.6	152	129	1.80	2.43	29.7	32.1	2.32	8.27	10.6	0.00	188,972	188,972	2.35	24.4	196	196,513
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.08	2.66	27.7	23.6	0.33	0.44	5.42	5.87	0.42	1.51	1.93	0.00	31,287	31,287	0.39	4.05	32.4	32,535

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	18.1	15.9	144	156	1.82	2.43	29.9	32.4	2.32	8.32	10.6	—	191,777	191,777	2.25	24.4	454	199,555
Area	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
Energy	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
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	18.1	15.9	144	156	1.82	2.43	29.9	32.4	2.32	8.32	10.6	0.00	191,777	191,777	2.25	24.4	454	199,555
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	36.4	34.0	167	132	1.88	2.67	30.7	33.4	2.55	8.55	11.1	—	197,363	197,363	2.54	25.0	12.0	204,891
Area	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	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
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	36.4	34.0	167	132	1.88	2.67	30.7	33.4	2.55	8.55	11.1	0.00	197,363	197,363	2.54	25.0	12.0	204,891
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	16.9	14.6	152	129	1.80	2.43	29.7	32.1	2.32	8.27	10.6	—	188,972	188,972	2.35	24.4	196	196,513
Area	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
Energy	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
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	16.9	14.6	152	129	1.80	2.43	29.7	32.1	2.32	8.27	10.6	0.00	188,972	188,972	2.35	24.4	196	196,513
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.08	2.66	27.7	23.6	0.33	0.44	5.42	5.87	0.42	1.51	1.93	—	31,287	31,287	0.39	4.05	32.4	32,535
Area	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
Energy	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

Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	3.08	2.66	27.7	23.6	0.33	0.44	5.42	5.87	0.42	1.51	1.93	0.00	31,287	31,287	0.39	4.05	32.4	32,535

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	3.68	2.13	137	23.5	1.49	2.30	20.5	22.8	2.20	5.89	8.09	—	157,699	157,699	1.32	23.6	367	165,118
User Defined Commercial	7.23	6.86	3.89	75.7	0.20	0.07	5.67	5.74	0.07	1.46	1.53	—	20,273	20,273	0.48	0.46	51.9	20,473
User Defined Recreational	7.20	6.90	3.16	56.3	0.14	0.05	3.81	3.87	0.05	0.98	1.03	—	13,804	13,804	0.45	0.38	34.9	13,963
Total	18.1	15.9	144	156	1.82	2.43	29.9	32.4	2.32	8.32	10.6	—	191,777	191,777	2.25	24.4	454	199,555
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	3.59	2.06	147	23.6	1.49	2.30	20.5	22.8	2.20	5.89	8.09	—	157,726	157,726	1.32	23.6	9.52	164,792
User Defined Commercial	26.1	25.6	15.1	62.0	0.27	0.31	6.42	6.73	0.30	1.67	1.97	—	26,930	26,930	0.65	0.95	1.53	27,230

User Defined Recreational	6.63	6.27	4.29	46.4	0.13	0.06	3.87	3.92	0.05	0.99	1.05	—	12,707	12,707	0.57	0.49	0.94	12,869
Total	36.4	34.0	167	132	1.88	2.67	30.7	33.4	2.55	8.55	11.1	—	197,363	197,363	2.54	25.0	12.0	204,891
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	0.66	0.38	26.3	4.29	0.27	0.42	3.71	4.13	0.40	1.07	1.47	—	26,111	26,111	0.22	3.90	26.2	27,305
User Defined Commercial	1.21	1.14	0.78	10.8	0.03	0.01	1.02	1.04	0.01	0.26	0.28	—	3,077	3,077	0.09	0.08	3.71	3,107
User Defined Recreational	1.20	1.14	0.63	8.44	0.02	0.01	0.69	0.70	0.01	0.18	0.19	—	2,098	2,098	0.08	0.07	2.49	2,123
Total	3.08	2.66	27.7	23.6	0.33	0.44	5.42	5.87	0.42	1.51	1.93	—	31,287	31,287	0.39	4.05	32.4	32,535

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	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

User Defined Commercial	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
User Defined Recreational	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
Total	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	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
User Defined Commercial	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
User Defined Recreational	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
Total	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	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
User Defined Commercial	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
User Defined Recreational	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
Total	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

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	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
Total	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coating	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	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
Total	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

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday		VMT/Sunday	VMT/Year
User Defined Industrial	824	824	824	300,760	54,796	54,796	54,796	20,000,540
User Defined Commercial	2,982	2,982	2,982	1,088,430	27,554	27,554	27,554	10,057,093
User Defined Recreational	3,079	3,079	3,079	1,123,835	18,526	18,526	18,526	6,762,003

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
User Defined Industrial	0.00	204	0.0330	0.0040	0.00
User Defined Commercial	0.00	204	0.0330	0.0040	0.00
User Defined Recreational	0.00	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
User Defined Industrial	0.00	0.00
User Defined Commercial	0.00	0.00
User Defined Recreational	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
User Defined Industrial	0.00	—

User Defined Commercial	0.00	—
User Defined Recreational	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

8. User Changes to Default Data

Screen	Justification

Land Use	—
Construction: Construction Phases	—
Construction: Off-Road Equipment	—
Operations: Energy Use	—
Operations: Vehicle Data	Using Trip Generation Rates from Traffic Study User Defined Industrial = Trucks User Defined Commercial = Warehouse Passenger Vehicles User Defined Recreational = Quick Serve Restaurant Passenger Vehicles Pass By and Diverted Trip Adjustments for Quick Serve Restaurant accounted for. Trip Length for Warehouse Passenger Vehicles based on Employee VMT Trip Length for Quick Serve Restaurant Passenger Vehicles based on CSTMD O-O Trip Length
Operations: Fleet Mix	Truck Fleet Percentages based on SCAQMD Warehouse Study. Passenger Vehicle Fleet based on Kern County 2028 Default Fleet normalized only for Vehicle Categories that are passenger vehicles.
Operations: Road Dust	Kern County Road Type Weighted Silt Content (Collector, Arterial, Freeway) from KCOG Conformity Analysis, 2024.

Airport Commerce Center - GHG Trucks to include full Trip Length Custom Report

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1.1. Basic Project Information

Data Field	Value
Project Name	Airport Commerce Center - GHG Trucks to include full Trip Length
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	18.0
Location	35.441920442950035, -119.04020275457175
County	Kern-San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2899
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Industrial	1.00	User Defined Unit	0.00	0.00	0.00	0.00	—	Warehouse/Manufacturing - Trucks

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—
Unmit.	114,786	114,786	0.94	17.1	268	120,185
Daily, Winter (Max)	—	—	—	—	—	—
Unmit.	114,799	114,799	0.94	17.2	6.95	119,941
Average Daily (Max)	—	—	—	—	—	—
Unmit.	114,791	114,791	0.94	17.1	116	120,040
Annual (Max)	—	—	—	—	—	—
Unmit.	19,005	19,005	0.16	2.84	19.1	19,874

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—
Mobile	114,786	114,786	0.94	17.1	268	120,185
Area	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	—	0.00
Water	0.00	0.00	0.00	0.00	—	0.00
Waste	0.00	0.00	0.00	0.00	—	0.00
Total	114,786	114,786	0.94	17.1	268	120,185
Daily, Winter (Max)	—	—	—	—	—	—

Mobile	114,799	114,799	0.94	17.2	6.95	119,941
Area	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	—	0.00
Water	0.00	0.00	0.00	0.00	—	0.00
Waste	0.00	0.00	0.00	0.00	—	0.00
Total	114,799	114,799	0.94	17.2	6.95	119,941
Average Daily	—	—	—	—	—	—
Mobile	114,791	114,791	0.94	17.1	116	120,040
Area	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	—	0.00
Water	0.00	0.00	0.00	0.00	—	0.00
Waste	0.00	0.00	0.00	0.00	—	0.00
Total	114,791	114,791	0.94	17.1	116	120,040
Annual	—	—	—	—	—	—
Mobile	19,005	19,005	0.16	2.84	19.1	19,874
Area	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	—	0.00
Water	0.00	0.00	0.00	0.00	—	0.00
Waste	0.00	0.00	0.00	0.00	—	0.00
Total	19,005	19,005	0.16	2.84	19.1	19,874

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—
User Defined Industrial	114,786	114,786	0.94	17.1	268	120,185
Total	114,786	114,786	0.94	17.1	268	120,185
Daily, Winter (Max)	—	—	—	—	—	—
User Defined Industrial	114,799	114,799	0.94	17.2	6.95	119,941
Total	114,799	114,799	0.94	17.2	6.95	119,941
Annual	—	—	—	—	—	—
User Defined Industrial	19,005	19,005	0.16	2.84	19.1	19,874
Total	19,005	19,005	0.16	2.84	19.1	19,874

8. User Changes to Default Data

Screen	Justification
Land Use	—
Construction: Construction Phases	—
Construction: Off-Road Equipment	—
Operations: Energy Use	—
Operations: Vehicle Data	Using Trip Generation Rates from Traffic Study User Defined Industrial = 412 trips per day or 50% from or into SCAB
Operations: Fleet Mix	Truck Fleet Percentages based on SCAQMD Warehouse Study.
Operations: Road Dust	Kern County Road Type Weighted Silt Content (Collector, Arterial, Freeway) from KCOG Conformity Analysis, 2024.

Airport Commerce Center - Vehicle Operations Custom Report

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5.16.2. Process Boilers

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Airport Commerce Center - Vehicle Operations
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	18.0
Location	35.441920442950035, -119.04020275457175
County	Kern-San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2899
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Industrial	1.00	User Defined Unit	0.00	0.00	0.00	0.00	—	Warehouse/Manufacturing - Trucks

User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0.00	0.00	—	Warehouse Passenger Vehicles
User Defined Recreational	1.00	User Defined Unit	0.00	0.00	0.00	0.00	—	Retail (QSR) Passenger Vehicles

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	18.1	15.9	144	156	1.82	2.43	29.9	32.4	2.32	8.32	10.6	0.00	191,777	191,777	2.25	24.4	454	199,555
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	36.4	34.0	167	132	1.88	2.67	30.7	33.4	2.55	8.55	11.1	0.00	197,363	197,363	2.54	25.0	12.0	204,891
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	16.9	14.6	152	129	1.80	2.43	29.7	32.1	2.32	8.27	10.6	0.00	188,972	188,972	2.35	24.4	196	196,513
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.08	2.66	27.7	23.6	0.33	0.44	5.42	5.87	0.42	1.51	1.93	0.00	31,287	31,287	0.39	4.05	32.4	32,535

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	18.1	15.9	144	156	1.82	2.43	29.9	32.4	2.32	8.32	10.6	—	191,777	191,777	2.25	24.4	454	199,555
Area	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
Energy	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
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	18.1	15.9	144	156	1.82	2.43	29.9	32.4	2.32	8.32	10.6	0.00	191,777	191,777	2.25	24.4	454	199,555
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	36.4	34.0	167	132	1.88	2.67	30.7	33.4	2.55	8.55	11.1	—	197,363	197,363	2.54	25.0	12.0	204,891
Area	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	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
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	36.4	34.0	167	132	1.88	2.67	30.7	33.4	2.55	8.55	11.1	0.00	197,363	197,363	2.54	25.0	12.0	204,891
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	16.9	14.6	152	129	1.80	2.43	29.7	32.1	2.32	8.27	10.6	—	188,972	188,972	2.35	24.4	196	196,513
Area	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
Energy	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
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	16.9	14.6	152	129	1.80	2.43	29.7	32.1	2.32	8.27	10.6	0.00	188,972	188,972	2.35	24.4	196	196,513
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.08	2.66	27.7	23.6	0.33	0.44	5.42	5.87	0.42	1.51	1.93	—	31,287	31,287	0.39	4.05	32.4	32,535
Area	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
Energy	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

Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	3.08	2.66	27.7	23.6	0.33	0.44	5.42	5.87	0.42	1.51	1.93	0.00	31,287	31,287	0.39	4.05	32.4	32,535

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	3.68	2.13	137	23.5	1.49	2.30	20.5	22.8	2.20	5.89	8.09	—	157,699	157,699	1.32	23.6	367	165,118
User Defined Commercial	7.23	6.86	3.89	75.7	0.20	0.07	5.67	5.74	0.07	1.46	1.53	—	20,273	20,273	0.48	0.46	51.9	20,473
User Defined Recreational	7.20	6.90	3.16	56.3	0.14	0.05	3.81	3.87	0.05	0.98	1.03	—	13,804	13,804	0.45	0.38	34.9	13,963
Total	18.1	15.9	144	156	1.82	2.43	29.9	32.4	2.32	8.32	10.6	—	191,777	191,777	2.25	24.4	454	199,555
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	3.59	2.06	147	23.6	1.49	2.30	20.5	22.8	2.20	5.89	8.09	—	157,726	157,726	1.32	23.6	9.52	164,792
User Defined Commercial	26.1	25.6	15.1	62.0	0.27	0.31	6.42	6.73	0.30	1.67	1.97	—	26,930	26,930	0.65	0.95	1.53	27,230

User Defined Recreational	6.63	6.27	4.29	46.4	0.13	0.06	3.87	3.92	0.05	0.99	1.05	—	12,707	12,707	0.57	0.49	0.94	12,869
Total	36.4	34.0	167	132	1.88	2.67	30.7	33.4	2.55	8.55	11.1	—	197,363	197,363	2.54	25.0	12.0	204,891
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	0.66	0.38	26.3	4.29	0.27	0.42	3.71	4.13	0.40	1.07	1.47	—	26,111	26,111	0.22	3.90	26.2	27,305
User Defined Commercial	1.21	1.14	0.78	10.8	0.03	0.01	1.02	1.04	0.01	0.26	0.28	—	3,077	3,077	0.09	0.08	3.71	3,107
User Defined Recreational	1.20	1.14	0.63	8.44	0.02	0.01	0.69	0.70	0.01	0.18	0.19	—	2,098	2,098	0.08	0.07	2.49	2,123
Total	3.08	2.66	27.7	23.6	0.33	0.44	5.42	5.87	0.42	1.51	1.93	—	31,287	31,287	0.39	4.05	32.4	32,535

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	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

User Defined Commercial	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
User Defined Recreational	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
Total	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	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
User Defined Commercial	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
User Defined Recreational	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
Total	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	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
User Defined Commercial	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
User Defined Recreational	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
Total	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

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	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
Total	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coating	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	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
Total	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

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday		VMT/Sunday	VMT/Year
User Defined Industrial	824	824	824	300,760	54,796	54,796	54,796	20,000,540
User Defined Commercial	2,982	2,982	2,982	1,088,430	27,554	27,554	27,554	10,057,093
User Defined Recreational	3,079	3,079	3,079	1,123,835	18,526	18,526	18,526	6,762,003

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
User Defined Industrial	0.00	204	0.0330	0.0040	0.00
User Defined Commercial	0.00	204	0.0330	0.0040	0.00
User Defined Recreational	0.00	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
User Defined Industrial	0.00	0.00
User Defined Commercial	0.00	0.00
User Defined Recreational	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
User Defined Industrial	0.00	—

User Defined Commercial	0.00	—
User Defined Recreational	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

8. User Changes to Default Data

Screen	Justification

Land Use	—
Construction: Construction Phases	—
Construction: Off-Road Equipment	—
Operations: Energy Use	—
Operations: Vehicle Data	Using Trip Generation Rates from Traffic Study User Defined Industrial = Trucks User Defined Commercial = Warehouse Passenger Vehicles User Defined Recreational = Quick Serve Restaurant Passenger Vehicles Pass By and Diverted Trip Adjustments for Quick Serve Restaurant accounted for. Trip Length for Warehouse Passenger Vehicles based on Employee VMT Trip Length for Quick Serve Restaurant Passenger Vehicles based on CSTMD O-O Trip Length
Operations: Fleet Mix	Truck Fleet Percentages based on SCAQMD Warehouse Study. Passenger Vehicle Fleet based on Kern County 2028 Default Fleet normalized only for Vehicle Categories that are passenger vehicles.
Operations: Road Dust	Kern County Road Type Weighted Silt Content (Collector, Arterial, Freeway) from KCOG Conformity Analysis, 2024.

Airport Commerce Center Industrial Project

Asphalt Paving Construction Trips Calculation

Building/Area	Parking Lot/Asphalt (acres)	Asphalt (ft2)	Asphalt (ft3)	Asphalt CY	PAVING Vendor One-Way Trips	Days in paving phase	Vendor One-Way Trips
Retail - QSR	2.19	95,422	47,711	1,767	220	10	22
Off-Site Improvements	11.36	494,842	247,421		1,146	20	57
Bldg 1 and 2	14.13	615,675	307,837	11,401	1,426	20	71
Bldg 3 - Manufacturing	7.63	332,494	166,247	6,157	770	20	39
Bldg 4	34.96	1,522,953	761,477	28,203	3,526	55	64

Assume 6 inch, 0.5 asphalt thickness
27 ft3/CY, Asume 16 CY truck capacity
Assume HHDT Trip, Vendor

Airport Commerce Center Industrial Project

Operations - Road Dust Aggregate Silt Content for Kern County Regional Emissions

Road Type	County Wide VMT by Roadway Classification	Percentage by Roadway Classification	Silt Loading (g/m^2)
Collector	503,506	3%	0.032
Arterial	8,811,419	44%	0.032
Freeway	10,682,624	53%	0.015
Aggregate (Collector/Arterial/Freeway)	19,997,549	100%	**0.023**

Source: Kern COG, 2024. Conformity Analysis for the 2025 Federal Transportation Improvement Program and the 2022 Regional Transportation Plan.

Airport Commerce Center Industrial Project

Construction HRA - AERMod Modeling Parameters

Diesel Particulate Matter Emission Sources

Source ID	Modeled Source	Location Description	AERMOD Source Type	Size		Initial Source Release Parameters (m) Release Height	Initial Lateral Dimension	Initial Vertical Dimension	Emissions[4,5] (g/s)	AERMOD Source Emission Rate	
SITE	Site - Off-Road Equipment Diesel Exhaust[1]	Project Site - Construction Area	Area	445428.7	m2	5	—	1.4	1		
ROAD	Roadway - On-Road Diesel Exhaust[2,3]	Truck Route - Merle Haggard Drive	Line-Volume	1439.2	meters	3.89	14.42	3.62	1	1.0E+00	g/s

1 Construction exhaust modeled as an area source. Release parameters for construction equipment DPM exhaust modeling from SCAQMD (2008) for gaseous exhaust from construction equipment.

2 Emissions for On-Road Mobile Sources (Vendor and Haul Diesel Exhaust) modeled only for roadways within 1,000 feet of the site within the modeling domain.

3 Parameters calculated as per US EPA Haul Road Workgroup Final Report released on March 2, 2012 which suggests the use of Adjacent Volume Sources to represent the haul road.

4 Emissions from CalEEModeling for Construction modeled during construction hours as included in Attachment A. See Note 2 above regarding roadway emission portion modeled.

5. Emissions are modeled in AERMod as 1 g/s and emission rates for DPM entered in HARP2 for each source.

Variable Emission Factors: ALL Sources

Monday - Friday						
1-6	0	0	0	0	0	0
7-12	0	0	4.2	4.2	4.2	4.2
13-18	0	4.2	4.2	4.2	4.2	0
19-24	0	0	0	0	0	0
Saturday						
1-6	0	0	0	0	0	0
7-12	0	0	0	0	0	0
13-18	0	0	0	0	0	0
19-24	0	0	0	0	0	0
Sunday						
1-6	0	0	0	0	0	0
7-12	0	0	0	0	0	0
13-18	0	0	0	0	0	0
19-24	0	0	0	0	0	0

Airport Commerce Center Industrial Project

Construction Health Risk Assessment Inputs

DPM Emissions for AERMOD Inputs

Net Work Days	633
Net Construction Years	2.4

		PM10E (DPM) in lbs		
Construction Area/Phase	**Construction Year**	**On-site**	**Off-Site**	**Total**
Retail	2025	11.05	0.01	11.06
	2026	69.64	0.29	69.93
Building 4	2026	307.00	5.89	312.89
	2027	93.80	11.56	105.36
Roadwy & Frontage Improvements	2026	50.62	0.00	50.62
	2027	9.93	0.80	10.73
Buildings 1 & 2	2026	99.11	2.17	101.28
	2027	62.12	6.71	68.84
Building 3	2027	103.11	2.47	105.58
	2028	20.40	1.24	21.64
	TOTAL	**826.78**	**31.13**	**857.91**

Note: PM10E = PM10 Exhaust which is a surrogate for Diesel Exhaust, particulate matter

	Worker	Vendor	Hauling
CalEEMod Default Distance (miles)	17.3	10.6	20
Road miles Included within 1/2 mile	0.89	0.89	0.89
Portion within 1/2 mile Buffer	5%	8%	4%

Off-Site Emissions included in local Roadway Segments assumption	15%

Note:

1. Conservatively assume that 15% of Construction Diesel Exhaust Emissions are emitted within 1,000 ft

HARP2 Sources	**Site Construction**	**Offsite Roadway**
Source ID	**SITE**	**ROAD**
Modeled Emissions (lbs)	**826.78**	**4.670**
HARP2 Modeled lbs/yr	344.5	1.9

Exposure years	2.40	
-0.25 yr to	2.15 years	Residential Exposure
start 16 years	2.4 duration	Worker Exposure

Airport Commerce Center Industrial Project

Construction Emissions

Criteria Pollutant and GHG Emissions by Year

Location	Year	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO_2e
Retail	2025	0.02	0.13	0.15	0.0003	0.01	0.01	0.02	0.01	0.00	0.01	26
	2026	0.15	0.99	1.16	0.0023	0.03	0.01	0.04	0.03	0.00	0.03	205
Bldg 4	2026	0.49	4.07	4.98	0.0097	0.16	0.75	0.91	0.14	0.27	0.42	1,191
	2027	2.53	1.81	3.05	0.0058	0.05	0.42	0.47	0.05	0.10	0.15	918
Roadway & Frontage	2026	0.08	0.63	0.74	0.0013	0.03	0.12	0.14	0.02	0.05	0.07	147
	2027	0.04	0.16	0.27	0.0004	0.01	0.03	0.03	0.00	0.01	0.01	62
Bldg 1 & 2	2026	0.16	1.33	1.68	0.0031	0.05	0.26	0.31	0.05	0.10	0.14	395
	2027	1.31	1.17	2.03	0.0037	0.03	0.26	0.29	0.03	0.06	0.09	578
Bldg 3	2027	0.18	1.48	2.08	0.0039	0.05	0.20	0.25	0.05	0.07	0.12	465
	2028	0.51	0.35	0.54	0.0010	0.01	0.04	0.05	0.01	0.01	0.02	127
		5.47	**12.12**	**16.69**	**0.03**	**0.43**	**2.08**	**2.51**	**0.40**	**0.67**	**1.07**	**4114**

Annual Emissions	tons/yr	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e (MT/yr)
ALL	2025	0.02	0.13	0.15	0.000	0.01	0.01	0.02	0.01	0.00	0.01	26
ALL	2026	0.89	7.01	8.57	0.016	0.27	1.13	1.40	0.25	0.42	0.66	1,939
ALL	2027	4.06	4.63	7.43	0.014	0.15	0.90	1.05	0.13	0.24	0.37	2,023
ALL	2028	0.51	0.35	0.54	0.001	0.01	0.04	0.05	0.01	0.01	0.02	127
	TOTAL	**5.47**	**12.12**	**16.69**	**0.031**	**0.43**	**2.08**	**2.51**	**0.40**	**0.67**	**1.07**	**4,114**

Average Daily	lbs/day	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
ALL	2025	1.3	11.7	12.9	0.024	0.481	0.883	1.4	0.4	0.4	0.8
ALL	2026	6.8	53.7	65.7	0.125	2.049	8.685	10.7	1.9	3.2	5.1
ALL	2027	31.1	35.4	56.9	0.105	1.113	6.909	8.0	1.0	1.8	2.9
ALL	2028	11.7	7.9	12.3	0.023	0.246	0.833	1.1	0.2	0.2	0.4
Overall Average		**17.3**	**38.3**	**52.7**	**0.1**	**1.4**	**6.6**	**7.9**	**1.3**	**2.1**	**3.4**

Working Days Modeled

Year	start	end	working days
2025	12/1/2025	12/31/2025	23
2026	1/1/2026	12/31/2026	261
2027	1/1/2027	12/31/2027	261
2028	1/1/2028	5/3/2028	88
			633

Bldg 1 = Warehousing
Bldg 2 = Manufacturing
Bldg 3 = Manufacturing
Bldg 4 = Warehousing (Refrigerated & Unrefrigerated)
Retail = 2 Quick Serve Restaurants

Airport Commerce Center Industrial Project

On-Site and 1/4 mile vicinity emissions

Ambient Air Quality Applicability Analysis (AAQA) Determination Under CEQA

Summer, Daily Maximum Emissions (lb/day)

Location	On-Site/Off-Site	Process	Vehicle Type	One-Way Trips/day	Round-Trips (Daily Visits)	Process Units	Quantity per Round Trip	Daily Quantity	ROG	NOx	CO	PM10E	PM2.5E	PM10 BWTW	PM2.5 BWTW	PM10D UST	PM2.5 DUST	PM10T	PM2.5T
Warehouse	On-Site	Cold Start	All Trucks	824	412	Starts	1	412	0.03	4.93	0.54	0.00	0.00	-	-	-	-		
Warehouse	On-Site	Idle	All Trucks	824	412	Idle-hours	0.25	103	0.41	5.70	6.75	0.00	0.00	-	-	-	-		
Warehouse	On-Site	Running Exhaust	All Trucks	824	412	miles	0.79	327	0.08	4.64	0.72	0.01	0.01	0.10	0.03	0.21	0.05		
Warehouse	Off-Site	Running Exhaust	All Trucks	824	412	miles	2.40	989	0.11	7.91	1.16	0.02	0.02	0.29	0.09	0.65	0.16		
Cold Storage	On-Site	Truck TRU Exhaust	MHD Trucks	105	53	Op hours	0.9	47	0.35	3.68	0.32	0.19	0.17	-	-	-	-		
Cold Storage	On-Site	Trailer TRU Exhaust	HHD Trucks	160	80	Op hours	1.6	128	1.48	10.23	1.37	0.18	0.17	-	-	-	-		
Warehouse	On-Site	Cold Start	Passenger Vehicles	2,982	1491	Starts	1	1,491	1.31	0.79	11.85	0.01	0.01	-	-	-	-		
Warehouse	On-Site	Evaporative - Diurnal	Passenger Vehicles	2,982	1491	Cold soak hours	9	13,419	2.80	-	-	-	-	-	-	-	-		
Warehouse	On-Site	Evaporative - Hot Soak	Passenger Vehicles	2,982	1491	Starts	1	1,491	0.29	-	-	-	-	-	-	-	-		
Warehouse	On-Site	Running Exhaust	Passenger Vehicles	2,982	1491	Miles	0.34	507	0.07	0.07	2.69	0.01	0.01	0.02	0.00	0.34	0.08		
Warehouse	Off-Site	Running Exhaust	Passenger Vehicles	2,982	1491	Miles	2.32	3,459	0.18	0.36	14.29	0.02	0.02	0.14	0.04	2.29	0.57		
Quick Serve Restaurant	On-Site	Running Exhaust	Passenger Vehicles	3,079	1540	miles	0.16	239	0.03	0.04	1.27	0.00	0.00	0.01	0.00	0.16	0.04		
Quick Serve Restaurant	Off-Site	Running Exhaust	Passenger Vehicles	3,079	1540	miles	1.8	2,771	0.15	0.29	11.45	0.02	0.02	0.12	0.04	1.84	0.46		
								Warehouse Trucks	2.45	37.09	10.86	0.40	0.37	0.38	0.13	0.86	0.22	1.64	0.71
								Warehouse Passenger Vehicle	4.65	1.23	28.84	0.04	0.04	0.16	0.05	2.63	0.66	2.83	0.75
								Retail Passenger Vehicle	0.18	0.32	12.72	0.02	0.02	0.12	0.04	1.99	0.50	2.14	0.56
									7.28	**38.65**	**52.41**	**0.47**	**0.43**	**0.67**	**0.21**	**5.48**	**1.37**	**6.62**	**2.02**

Airport Commerce Center Industrial Project

On-Site and 1/4 mile vicinity emissions

Ambient Air Quality Applicability Analysis (AAQA) Determination Under CEQA

Winter, Daily Maximum Emissions (lb/day)

Location	On-Site/Off-Site	Process	Vehicle Type	One-Way Trips/day	Round-Trips (Daily Visits)	Process Units	Quantity per Round Trip	Daily Quantity	ROG	NOx	CO	PM10E	PM2.5E	PM10 BWTW	PM2.5 BWTW	PM10D UST	PM2.5 DUST	PM10T	PM2.5T
Warehouse	On-Site	Cold Start	All Trucks	824	412	Starts	1	412	0.03	4.94	0.55	0.00	0.00	-	-	-	-		
Warehouse	On-Site	Idle	All Trucks	824	412	Idle-hours	0.25	103	0.36	6.33	7.21	0.00	0.00	-	-	-	-		
Warehouse	On-Site	Running Exhaust	All Trucks	824	412	miles	0.79	327	0.08	5.39	0.72	0.01	0.01	0.10	0.03	0.21	0.05		
Warehouse	Off-Site	Running Exhaust	All Trucks	824	412	miles	2.40	989	0.11	9.18	1.15	0.02	0.02	0.29	0.09	0.65	0.16		
Cold Storage	On-Site	Truck TRU Exhaust	MHD Trucks	105	53	Op hours	0.9	47	0.35	3.68	0.32	0.19	0.17	-	-	-	-		
Cold Storage	On-Site	Trailer TRU Exhaust	HHD Trucks	160	80	Op hours	1.6	128	1.48	10.23	1.37	0.18	0.17	-	-	-	-		
Warehouse	On-Site	Cold Start	Passenger Vehicles	2,982	1491	Starts	1	1,491	2.11	0.64	22.00	0.01	0.01	-	-	-	-		
Warehouse	On-Site	Evaporative - Diurnal	Passenger Vehicles	2,982	1491	Cold soak hours	9	13,419	1.96	-	-	-	-	-	-	-	-		
Warehouse	On-Site	Evaporative - Hot Soak	Passenger Vehicles	2,982	1491	Starts	1	1,491	1.37	-	-	-	-	-	-	-	-		
Warehouse	On-Site	Running Exhaust	Passenger Vehicles	2,982	1491	Miles	0.34	507	0.05	0.12	1.39	0.01	0.01	0.02	0.01	0.34	0.08		
Warehouse	Off-Site	Running Exhaust	Passenger Vehicles	2,982	1491	Miles	2.32	3,459	0.23	0.68	8.58	0.03	0.03	0.13	0.04	2.29	0.57		
Quick Serve Restaurant	On-Site	Running Exhaust	Passenger Vehicles	3,079	1540	miles	0.16	239	0.03	0.05	0.66	0.00	0.00	0.01	0.00	0.16	0.04		
Quick Serve Restaurant	Off-Site	Running Exhaust	Passenger Vehicles	3,079	1540	miles	1.8	2,771	0.19	0.54	6.87	0.03	0.02	0.10	0.03	1.84	0.46		
								Warehouse Trucks	2.41	39.75	11.31	0.40	0.37	0.38	0.13	0.86	0.22	1.64	0.71
								Warehouse Passenger Vehicle	5.73	1.44	31.97	0.05	0.04	0.15	0.04	2.63	0.66	2.82	0.74
								Retail Passenger Vehicle	0.21	0.60	7.53	0.03	0.03	0.11	0.03	1.99	0.50	2.14	0.56
									8.35	**41.78**	**50.81**	**0.47**	**0.44**	**0.64**	**0.21**	**5.48**	**1.37**	**6.60**	**2.01**

Airport Commerce Center Industrial Project

On-Site and 1/4 mile Vicinity Emissions during Operations

PM10 Exhaust as Diesel Particulate Matter Emissions

									PM10E (DPM)	
Location	On-Site/Off-Site	Process	Vehicle Type	One-Way Trips/day	Round-Trips (Daily Visits)	Process Units	Quantity per Round Trip	Daily Quantity	lb/day	lb/yr
Warehouse	On-Site	Cold Start	All Trucks	824	412	Starts	1	412	0.0001	0.02
Warehouse	On-Site	Cold Start + Idle	All Trucks	824	412	Idle-hours	0.25	103	0.005	1.78
Warehouse	On-Site	Running Exhaust	All Trucks	824	412	miles	0.79	327	0.01	3.23
Warehouse	Off-Site	Running Exhaust	All Trucks	824	412	miles	2.40	989	0.02	6.39

Warehouse Operations - Cold Storage - TRU Emissions (lbs/day) -

Location	Process	Vehicle Type	One-Way Trips/day	Round-Trips (Daily Visits)	Process Units	Quantity per Vehicle Visit (RT)	Daily Quantity	lb/day	lb/yr
Cold Storage	On-Site	Truck TRU Exhaust	MHD Trucks	105	53	Op hours	0.9	47	0.19	69.14
Cold Storage	On-Site	Trailer TRU Exhaust	HHD Trucks	160	80	Op hours	1.6	128	0.18	65.80

146.36

Airport Commerce Center Industrial Project

On-Site and 1/4 mile Vicinity Emissions during Operations

Mitigated - PM10 Exhaust as Diesel Particulate Matter Emissions

									PM10E (DPM)	
Location	On-Site/Off-Site	Process	Vehicle Type	One-Way Trips/day	Round-Trips (Daily Visits)	Process Units	Quantity per Round Trip	Daily Quantity	lb/day	lb/yr
Warehouse	On-Site	Cold Start	All Trucks	824	412	Starts	1	412	0.0001	0.02
Warehouse	On-Site	Cold Start + Idle	All Trucks	824	412	Idle-hours	0.25	103	0.005	1.78
Warehouse	On-Site	Running Exhaust	All Trucks	824	412	miles	0.79	327	0.01	3.23
Warehouse	Off-Site	Running Exhaust	All Trucks	824	412	miles	2.40	989	0.02	6.39

Warehouse Operations - Cold Storage - TRU Emissions (lbs/day) -

Location	On-Site/Off-Site	Process	Vehicle Type	One-Way Trips/day	Round-Trips (Daily Visits)	Process Units	Quantity per Vehicle Visit (RT)	Daily Quantity	lb/day	lb/yr
Cold Storage	On-Site	Truck TRU Exhaust	MHD Trucks	105	53	Op hours	0.5	26	0.11	38.41
Cold Storage	On-Site	Trailer TRU Exhaust	HHD Trucks	160	80	Op hours	0.5	40	0.06	20.56

lb/day	lb/yr
0.19	70.40

Airport Commerce Center Industrial Project

On-Site and 1/4 mile Vicinity Emissions during Operations

Unmitigated - HARP DPM Emission Inputs

					PM10E (DPM)
Source ID	**Location**	**Apportioned by Trips**	**out of Trips**	**Process**	**lb/yr**
EGEN-01	Building 1	NA	NA	Emergency Generator - Testing & Mainentance	0.724
EGEN-02	Building 2	NA	NA	Emergency Generator - Testing & Mainentance	0.724
EGEN-03	Building 3	NA	NA	Emergency Generator - Testing & Mainentance	0.724
EGEN-04-1	Building 4	NA	NA	Emergency Generator - Testing & Mainentance	0.724
EGEN-04-2	Building 4	NA	NA	Emergency Generator - Testing & Mainentance	0.724
EGEN-04-3	Building 4	NA	NA	Emergency Generator - Testing & Mainentance	4.748
DOCKS-01	Building 1 Docks	147	824	Cold Start + Idle	0.32
DOCKS-02	Building 2 Docks	87	824	Cold Start + Idle	0.19
DOCKS-03	Building 3 Docks	81	824	Cold Start + Idle	0.18
DOCKS-04-NW	Building 4 Docks	127	824	Cold Start + Idle	0.28
DOCKS-04-NE	Building 4 Docks	127	824	Cold Start + Idle	0.28
DOCKS-04-SE	Building 4 Docks	127	824	Cold Start + Idle	0.28
DOCKS-04-SW	Building 4 Docks	127	824	Cold Start + Idle	0.28
TRU-04-SE	Building 4 TRUs	133	265	TRU Emissions	67.47
TRU-04-SW	Building 4 TRUs	133	265	TRU Emissions	67.47
ONSITE	On-Site Areawide	824	824	On-Site Running Exhaust all Trucks	3.23
OFFSITE-01	Off-Site Truck Route 1	618	824	Off-Site Running Exhaust - Primary	4.79
OFFSITE-02	Off-Site Truck Route 2	206	824	Off-Site Running Exhaust Alt Route	1.60
					153.13

Airport Commerce Center Industrial Project

On-Site and 1/4 mile Vicinity Emissions during Operations
Mitigated - HARP DPM Emission Inputs

Source ID	Location	Apportioned by Trips	out of Total Trips	Process	PM10E (DPM) lb/yr
EGEN-01	Building 1	NA	NA	Emergency Generator - Testing & Mainentance	0.724
EGEN-02	Building 2	NA	NA	Emergency Generator - Testing & Mainentance	0.724
EGEN-03	Building 3	NA	NA	Emergency Generator - Testing & Mainentance	0.724
EGEN-04-1	Building 4	NA	NA	Emergency Generator - Testing & Mainentance	0.724
EGEN-04-2	Building 4	NA	NA	Emergency Generator - Testing & Mainentance	0.724
EGEN-04-3	Building 4	NA	NA	Emergency Generator - Testing & Mainentance	4.748
DOCKS-01	Building 1 Docks	147	824	Cold Start + Idle	0.32
DOCKS-02	Building 2 Docks	87	824	Cold Start + Idle	0.19
DOCKS-03	Building 3 Docks	81	824	Cold Start + Idle	0.18
DOCKS-04-NW	Building 4 Docks	127	824	Cold Start + Idle	0.28
DOCKS-04-NE	Building 4 Docks	127	824	Cold Start + Idle	0.28
DOCKS-04-SE	Building 4 Docks	127	824	Cold Start + Idle	0.28
DOCKS-04-SW	Building 4 Docks			Cold Start + Idle	0.28
TRU-04-SE	Building 4 TRUs	133	265	TRU Emissions	29.49
TRU-04-SW	Building 4 TRUs	133	265	TRU Emissions	29.49
ONSITE	On-Site Areawide	824	824	On-Site Running Exhaust all Trucks	3.23
OFFSITE-01	Off-Site Truck Route 1	618	824	Off-Site Running Exhaust - Primary	4.79
OFFSITE-02	Off-Site Truck Route 2	206	824	Off-Site Running Exhaust Alt Route	1.60
					78.76

Airport Commerce Center Industrial Project

Regional Emissions

Criteria Pollutant Emissions and GHG from TRUs - Unmitigated

								Annual Emissions (tons/yr)						
Phase Name	**Equipment Type**	**Fuel Type**	**Calendar Year**	**Units**	**TRUs/day**	**Hrs/Day**	**hrs/yr**	ROG	NOx	CO	SOx	PM10E	PM2_5E	CO2e
Operation	Transport Refrigeration Units- Truck	Diesel	2028	lb/hr	53	0.9	17,280	0.06	0.67	0.06	0.001	0.03	0.03	107.42
	Transport Refrigeration Units- Trailer	Diesel	2028	lb/hr	80	1.6	46,660	0.27	1.87	0.25	0.003	0.03	0.03	363.87
					133			**0.33**	**2.54**	**0.31**	**0.004**	**0.07**	**0.06**	

Airport Commerce Center Industrial Project

Regional Emissions

Criteria Pollutant Emissions and GHG from TRUs - Mitigated Scenario

									Annual Emissions (tons/yr)					
Phase Name	Equipment Type	Fuel Type	Calendar Year	Units	TRUs/day	Hrs/Day	hrs/yr	ROG	NOx	CO	SOx	PM10E	PM2_5E	CO2e
Operation	Transport Refrigeration Units- Truck	Diesel	2028	lb/hr	53	0.5	9,600	0.03	0.37	0.03	0.001	0.02	0.02	59.68
	Transport Refrigeration Units- Trailer	Diesel	2028			0.5	14,581	0.08	0.58	0.08	0.001	0.01	0.01	113.71
					133			**0.12**	**0.96**	**0.11**	**0.002**	**0.03**	**0.03**	**173.39**

Airport Commerce Center Industrial Project

Transport Refrigeration Unit Emission Factors

Model Output: Off-Road Web Query (v1.1.0) Emissions Inventory - Kern (SJV) 2028 Exhaust Emissions

Units	Truck Type	Units	Avg Hrs/Day	Units	ROG	NOx	CO	SOx	PM10E	PM2_5E	CO2e
Truck TRU	MHDT	lb/hr	0.9	lb per operating hour	0.0073	0.0778	0.0067	0.0001	0.0040	0.0037	12.4334
Trailer TRU	HHDT	lb/hr	1.6	lb per operating hour	**0.012**	0.08	**0.011**	**0.000**	0.0014	0.0013	15.5968

Notes:

Trailer TRU Emissions are based on Instate and Out of State Trailers

Truck TRU Emissions are only reported for Instate Trailers

See Additional Calculations from WebQuery Data for dervation of hourly emission rates for TRUs.

Average Hours per Unit for the Inventory are Included for Reference. Operating time used for Localized Emissions Analysis for AAQA and HRAs based on the hours TRUs are expected to operate onsite.

Airport Commerce Center Industrial Project

EMFAC2021 v1.02 Emission Factors - Annual - Project Level for Passenger Vehicles (Kern-San Joaquin 2028 - First Year of Operation)

											BRAKE & TIRE WEAR		PM10	PM2.5
Vehicle	Season	Process	Process	Time / Speed	Units	ROG	NOx	CO	PM10	PM2_5	PM10	PM2_5	DUST	DUST
LDA	Annual	STREX	Start Exhaust	540	g/start	0.283	0.183	2.935	0.003	0.003	—	—	—	—
LDA	Annual	DIURN	Diurnal	—	g/hr	0.059						—	—	—
LDA	Annual	HOTSOAK	Hot Soak	—	g/start	0.088						—	—	—
LDA	Annual	RUNLOSS	Running Loss	—	g/hr	0.760						—	—	—
LDA	Annual	RUNEX	Running Exhaust/Brake & Tire Wear	5	g/mi	0.040	0.041	1.318	0.007	0.007	0.013	0.004	0.30	0.07
LDA	Annual	RUNEX	Running Exhaust/Brake & Tire Wear	10	g/mi	0.026	0.035	1.184	0.004	0.004	0.015	0.004	0.30	0.07
LDA	Annual	RUNEX	Running Exhaust/Brake & Tire Wear	15	g/mi	0.017	0.031	1.074	0.003	0.003	0.016	0.005	0.30	0.07
LDA	Annual	RUNEX	Running Exhaust/Brake & Tire Wear	20	g/mi	0.012	0.028	0.979	0.002	0.002	0.017	0.005	0.30	0.07
LDA	Annual	RUNEX	Running Exhaust/Brake & Tire Wear	25	g/mi	0.009	0.025	0.897	0.002	0.001	0.019	0.006	0.30	0.07
LDA	Annual	RUNEX	On-Site (5 mph)	Average On-site	g/mi	0.040	0.041	1.318	0.007	0.007	0.013	0.004	0.30	0.07
LDA	Annual	RUNEX	Off-Site (5-25 mph)	Average Off-Site Local	g/mi	0.021	0.032	1.090	0.004	0.003	0.016	0.005	0.30	0.07
LDT1	Annual	STREX	Start Exhaust	540	g/start	0.680	0.378	6.488	0.005	0.005				
LDT1	Annual	DIURN	Diurnal	—	g/hr	0.143								
LDT1	Annual	HOTSOAK	Hot Soak	—	g/start	0.173								
LDT1	Annual	RUNLOSS	Running Loss	—	g/hr	1.994								
LDT1	Annual	RUNEX	Running Exhaust/Brake & Tire Wear	5	g/mi	0.156	0.166	3.015	0.011	0.010	0.016	0.005	0.30	0.07
LDT1	Annual	RUNEX	Running Exhaust/Brake & Tire Wear	10	g/mi	0.101	0.140	2.697	0.007	0.006	0.018	0.006	0.30	0.07
LDT1	Annual	RUNEX	Running Exhaust/Brake & Tire Wear	15	g/mi	0.069	0.121	2.429	0.005	0.004	0.021	0.006	0.30	0.07
LDT1	Annual	RUNEX	Running Exhaust/Brake & Tire Wear	20	g/mi	0.049	0.107	2.201	0.003	0.003	0.023	0.007	0.30	0.07
LDT1	Annual	RUNEX	Running Exhaust/Brake & Tire Wear	25	g/mi	0.037	0.097	2.006	0.003	0.002	0.023	0.007	0.30	0.07
LDT1	Annual	RUNEX	On-Site (5 mph)	Average On-site	g/mi	0.156	0.166	3.015	0.011	0.010	0.016	0.005	0.30	0.07
LDT1	Annual	RUNEX	Off-Site (5-25 mph)	Average Off-Site Local	g/mi	0.052	0.109	2.212	0.004	0.003	0.022	0.007	0.30	0.07
LDT2	Annual	STREX	Start Exhaust	540	g/start	0.390	0.258	3.930	0.004	0.003				
LDT2	Annual	DIURN	Diurnal	—	g/hr	0.063								
LDT2	Annual	HOTSOAK	Hot Soak	—	g/start	0.071								
LDT2	Annual	RUNLOSS	Running Loss	—	g/hr	0.812								
LDT2	Annual	RUNEX	Running Exhaust/Brake & Tire Wear	5	g/mi	0.056	0.069	1.615	0.008	0.007	0.016	0.005	0.30	0.07
LDT2	Annual	RUNEX	Running Exhaust/Brake & Tire Wear	10	g/mi	0.036	0.059	1.459	0.005	0.005	0.018	0.005	0.30	0.07
LDT2	Annual	RUNEX	Running Exhaust/Brake & Tire Wear	15	g/mi	0.024	0.052	1.325	0.003	0.003	0.020	0.006	0.30	0.07
LDT2	Annual	RUNEX	Running Exhaust/Brake & Tire Wear	20	g/mi	0.017	0.046	1.208	0.002	0.002	0.022	0.007	0.30	0.07
LDT2	Annual	RUNEX	Running Exhaust/Brake & Tire Wear	25	g/mi	0.012	0.042	1.106	0.002	0.002	0.023	0.007	0.30	0.07
LDT2	Annual	RUNEX,PMBW,PMTW	On-Site (5 mph)	Average On-site	g/mi	0.056	0.069	1.615	0.008	0.007	0.016	0.005	0.30	0.07
LDT2	Annual	RUNEX,PMBW,PMTW	Off-Site (5-25 mph)	Average Off-Site Local	g/mi	0.018	0.047	1.213	0.002	0.002	0.022	0.007	0.30	0.07
MDV	Annual	STREX	Start Exhaust	540	g/start	0.548	0.345	4.556	0.004	0.004				
MDV	Annual	DIURN	Diurnal	—	g/hr	0.091								
MDV	Annual	HOTSOAK	Hot Soak	—	g/start	0.101								
MDV	Annual	RUNLOSS	Running Loss	—	g/hr	1.299								
MDV	Annual	RUNEX	Running Exhaust/Brake & Tire Wear	5	g/mi	0.086	0.108	2.010	0.008	0.008	0.016	0.005	0.30	0.07
MDV	Annual	RUNEX	Running Exhaust/Brake & Tire Wear	10	g/mi	0.055	0.092	1.806	0.005	0.005	0.018	0.006	0.30	0.07
MDV	Annual	RUNEX	Running Exhaust/Brake & Tire Wear	15	g/mi	0.037	0.081	1.623	0.004	0.003	0.020	0.006	0.30	0.07
MDV	Annual	RUNEX	Running Exhaust/Brake & Tire Wear	20	g/mi	0.026	0.072	1.469	0.003	0.002	0.023	0.007	0.30	0.07
MDV	Annual	RUNEX	Running Exhaust/Brake & Tire Wear	25	g/mi	0.019	0.065	1.343	0.002	0.002	0.023	0.007	0.30	0.07
MDV	Annual	RUNEX,PMBW,PMTW	On-Site (5 mph)	Average On-site	g/mi	0.086	0.108	2.010	0.008	0.008	0.016	0.005	0.30	0.07
MDV	Annual	RUNEX,PMBW,PMTW	Off-Site (5-25 mph)	Average Off-Site Local	g/mi	0.027	0.073	1.478	0.003	0.002	0.022	0.007		

Airport Commerce Center Industrial Project

EMFAC2021 v1.02 Emission Factors - Annual - Project Level for Passenger Vehicles (Kern-San Joaquin 2028 - First Year of Operation)

											BRAKE & TIRE WEAR		PM10	PM2.5
Vehicle	Season	Process	Process	Time / Speed	Units	ROG	NOx	CO	PM10	PM2_5	PM10	PM2_5	DUST	DUST
LDA	Summer	STREX	Start Exhaust	540	g/start	0.294	0.181	2.884	0.003	0.003				
LDA	Summer	DIURN	Diurnal	—	g/hr	0.081								
LDA	Summer	HOTSOAK	Hot Soak	—	g/start	0.075								
LDA	Summer	RUNLOSS	Running Loss	—	g/hr	0.797								
LDA	Summer	RUNEX	Running Exhaust/Brake & Tire Wear	5	g/mi	0.043	0.041	1.980	0.007	0.007	0.013	0.004	0.30	0.08
LDA	Summer	RUNEX	Running Exhaust/Brake & Tire Wear	10	g/mi	0.027	0.035	1.780	0.004	0.004	0.015	0.004	0.30	0.08
LDA	Summer	RUNEX	Running Exhaust/Brake & Tire Wear	15	g/mi	0.018	0.031	1.615	0.003	0.003	0.016	0.005	0.30	0.08
LDA	Summer	RUNEX	Running Exhaust/Brake & Tire Wear	20	g/mi	0.013	0.028	1.473	0.002	0.002	0.017	0.005	0.30	0.08
LDA	Summer	RUNEX	Running Exhaust/Brake & Tire Wear	25	g/mi	0.009	0.025	1.349	0.002	0.001	0.019	0.006	0.30	0.08
LDA	Summer	RUNEX	On-Site (5 mph)	Average On-site	g/mi	0.043	0.041	1.980	0.007	0.007	0.013	0.004	0.30	0.08
LDA	Summer	RUNEX	Off-Site (5-25 mph)	Average Off-Site Local	g/mi	0.022	0.032	1.639	0.004	0.003	0.016	0.005	0.30	0.08
LDT1	Summer	STREX	Start Exhaust	540	g/start	0.708	0.374	6.375	0.005	0.005				
LDT1	Summer	DIURN	Diurnal	—	g/hr	0.202								
LDT1	Summer	HOTSOAK	Hot Soak	—	g/start	0.195								
LDT1	Summer	RUNLOSS	Running Loss	—	g/hr	2.115								
LDT1	Summer	RUNEX	Running Exhaust/Brake & Tire Wear	5	g/mi	0.168	0.166	4.520	0.011	0.010	0.016	0.005	0.30	0.08
LDT1	Summer	RUNEX	Running Exhaust/Brake & Tire Wear	10	g/mi	0.108	0.141	4.044	0.007	0.006	0.018	0.006	0.30	0.08
LDT1	Summer	RUNEX	Running Exhaust/Brake & Tire Wear	15	g/mi	0.074	0.122	3.642	0.005	0.004	0.021	0.006	0.30	0.08
LDT1	Summer	RUNEX	Running Exhaust/Brake & Tire Wear	20	g/mi	0.053	0.108	3.300	0.003	0.003	0.023	0.007	0.30	0.08
LDT1	Summer	RUNEX	Running Exhaust/Brake & Tire Wear	25	g/mi	0.040	0.097	3.007	0.003	0.002	0.023	0.007	0.30	0.08
LDT1	Summer	RUNEX	On-Site (5 mph)	Average On-site	g/mi	0.168	0.166	4.520	0.011	0.010	0.016	0.005	0.30	0.08
LDT1	Summer	RUNEX	Off-Site (5-25 mph)	Average Off-Site Local	g/mi	0.055	0.109	3.317	0.004	0.003	0.022	0.007	0.30	0.08
LDT2	Summer	STREX	Start Exhaust	540	g/start	0.406	0.255	3.862	0.004	0.003				
LDT2	Summer	DIURN	Diurnal	—	g/hr	0.085								
LDT2	Summer	HOTSOAK	Hot Soak	—	g/start	0.078								
LDT2	Summer	RUNLOSS	Running Loss	—	g/hr	0.847								
LDT2	Summer	RUNEX	Running Exhaust/Brake & Tire Wear	5	g/mi	0.060	0.069	2.427	0.008	0.007	0.016	0.005	0.30	0.08
LDT2	Summer	RUNEX	Running Exhaust/Brake & Tire Wear	10	g/mi	0.038	0.059	2.193	0.005	0.005	0.018	0.005	0.30	0.08
LDT2	Summer	RUNEX	Running Exhaust/Brake & Tire Wear	15	g/mi	0.026	0.052	1.992	0.003	0.003	0.020	0.006	0.30	0.08
LDT2	Summer	RUNEX	Running Exhaust/Brake & Tire Wear	20	g/mi	0.018	0.046	1.817	0.002	0.002	0.022	0.007	0.30	0.08
LDT2	Summer	RUNEX	Running Exhaust/Brake & Tire Wear	25	g/mi	0.013	0.042	1.665	0.002	0.002	0.023	0.007	0.30	0.08
LDT2	Summer	RUNEX,PMBW,PMTW	On-Site (5 mph)	Average On-site	g/mi	0.060	0.069	2.427	0.008	0.007	0.016	0.005	0.30	0.08
LDT2	Summer	RUNEX,PMBW,PMTW	Off-Site (5-25 mph)	Average Off-Site Local	g/mi	0.019	0.047	1.824	0.002	0.002	0.022	0.007	0.30	0.08
MDV	Summer	STREX	Start Exhaust	540	g/start	0.571	0.341	4.475	0.004	0.004				
MDV	Summer	DIURN	Diurnal	—	g/hr	0.119								
MDV	Summer	HOTSOAK	Hot Soak	—	g/start	0.111								
MDV	Summer	RUNLOSS	Running Loss	—	g/hr	1.284								
MDV	Summer	RUNEX	Running Exhaust/Brake & Tire Wear	5	g/mi	0.093	0.108	2.990	0.008	0.008	0.016	0.005	0.30	0.08
MDV	Summer	RUNEX	Running Exhaust/Brake & Tire Wear	10	g/mi	0.059	0.093	2.692	0.005	0.005	0.018	0.006	0.30	0.08
MDV	Summer	RUNEX	Running Exhaust/Brake & Tire Wear	15	g/mi	0.039	0.081	2.427	0.004	0.003	0.020	0.006	0.30	0.08
MDV	Summer	RUNEX	Running Exhaust/Brake & Tire Wear	20	g/mi	0.028	0.072	2.203	0.003	0.002	0.023	0.007	0.30	0.08
MDV	Summer	RUNEX	Running Exhaust/Brake & Tire Wear	25	g/mi	0.020	0.065	2.015	0.002	0.002	0.023	0.007	0.30	0.08
MDV	Summer	RUNEX,PMBW,PMTW	On-Site (5 mph)	Average On-site	g/mi	0.093	0.108	2.990	0.008	0.008	0.016	0.005	0.30	0.08
MDV	Summer	RUNEX,PMBW,PMTW	Off-Site (5-25 mph)	Average Off-Site Local	g/mi	0.029	0.073	2.215	0.003	0.002	0.022	0.007	0.30	0.08

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											BRAKE & TIRE WEAR		PM10	PM2.5
Vehicle	Season	Process	Process	Time / Speed	Units	ROG	NOx	CO	PM10	PM2_5	PM10	PM2_5	DUST	DUST
LDA	Winter	DIURN	Diurnal	—	g/hr	0.051								
LDA	Winter	HOTSOAK	Hot Soak	—	g/start	0.061								
LDA	Winter	RUNLOSS	Running Loss	—	g/hr	0.759								
LDA	Winter	RUNEX	Running Exhaust/Brake & Tire Wear	5	g/mi	0.037	0.065	1.063	0.007	0.007	0.013	0.004	0.30	0.08
LDA	Winter	RUNEX	Running Exhaust/Brake & Tire Wear	10	g/mi	0.024	0.057	0.956	0.004	0.004	0.015	0.004	0.30	0.08
LDA	Winter	RUNEX	Running Exhaust/Brake & Tire Wear	15	g/mi	0.016	0.050	0.866	0.003	0.003	0.016	0.005	0.30	0.08
LDA	Winter	RUNEX	Running Exhaust/Brake & Tire Wear	20	g/mi	0.011	0.044	0.790	0.002	0.002	0.017	0.005	0.30	0.08
LDA	Winter	RUNEX	Running Exhaust/Brake & Tire Wear	25	g/mi	0.008	0.040	0.723	0.002	0.001	0.019	0.006	0.30	0.08
LDA	Winter	RUNEX	On-Site (5 mph)	Average On-site	g/mi	0.037	0.065	1.063	0.007	0.007	0.013	0.004	0.30	0.08
LDA	Winter	RUNEX	Off-Site (5-25 mph)	Average Off-Site Local	g/mi	0.019	0.051	0.880	0.004	0.003	0.016	0.005	0.30	0.08
LDT1	Winter	STREX	Start Exhaust	540	g/start	1.737	0.484	19.614	0.005	0.005				
LDT1	Winter	DIURN	Diurnal	—	g/hr	0.120								
LDT1	Winter	HOTSOAK	Hot Soak	—	g/start	0.153								
LDT1	Winter	RUNLOSS	Running Loss	—	g/hr	2.005								
LDT1	Winter	RUNEX	Running Exhaust/Brake & Tire Wear	5	g/mi	0.145	0.267	2.440	0.011	0.010	0.016	0.005	0.30	0.08
LDT1	Winter	RUNEX	Running Exhaust/Brake & Tire Wear			0.093	0.226	2.183	0.007	0.006	0.018	0.006	0.30	0.08
LDT1	Winter	RUNEX	Running Exhaust/Brake & Tire Wear	15	g/mi	0.063	0.196	1.966	0.005	0.004	0.021	0.006	0.30	0.08
LDT1	Winter	RUNEX	Running Exhaust/Brake & Tire Wear	20	g/mi	0.045	0.173	1.781	0.003	0.003	0.023	0.007	0.30	0.08
LDT1	Winter	RUNEX	Running Exhaust/Brake & Tire Wear	25	g/mi	0.034	0.156	1.623	0.003	0.002	0.023	0.007	0.30	0.08
LDT1	Winter	RUNEX	On-Site (5 mph)	Average On-site	g/mi	0.145	0.267	2.440	0.011	0.010	0.016	0.005	0.30	0.08
LDT1	Winter	RUNEX	Off-Site (5-25 mph)	Average Off-Site Local	g/mi	0.048	0.175	1.790	0.004	0.003	0.022	0.007	0.30	0.08
LDT2	Winter	STREX	Start Exhaust	540	g/start	0.995	0.331	11.881	0.004	0.003				
LDT2	Winter	DIURN	Diurnal	—	g/hr	0.055								
LDT2	Winter	HOTSOAK	Hot Soak	—	g/start	0.063								
LDT2	Winter	RUNLOSS	Running Loss	—	g/hr	0.810								
LDT2	Winter	RUNEX	Running Exhaust/Brake & Tire Wear	5	g/mi	0.052	0.111	1.304	0.008	0.007	0.016	0.005	0.30	0.08
LDT2	Winter	RUNEX	Running Exhaust/Brake & Tire Wear	10	g/mi	0.033	0.095	1.178	0.005	0.005	0.018	0.005	0.30	0.08
LDT2	Winter	RUNEX	Running Exhaust/Brake & Tire Wear	15	g/mi	0.022	0.083	1.068	0.003	0.003	0.020	0.006	0.30	0.08
LDT2	Winter	RUNEX	Running Exhaust/Brake & Tire Wear	20	g/mi	0.016	0.074	0.974	0.002	0.002	0.022	0.007	0.30	0.08
LDT2	Winter	RUNEX	Running Exhaust/Brake & Tire Wear	25	g/mi	0.012	0.067	0.892	0.002	0.002	0.023	0.007	0.30	0.08
LDT2	Winter	RUNEX,PMBW,PMTW	On-Site (5 mph)	Average On-site	g/mi	0.052	0.111	1.304	0.008	0.007	0.016	0.005	0.30	0.08
LDT2	Winter	RUNEX,PMBW,PMTW	Off-Site (5-25 mph)	Average Off-Site Local	g/mi	0.016	0.075	0.978	0.002	0.002	0.022	0.007	0.30	0.08
MDV	Winter	STREX	Start Exhaust	540	g/start	1.401	0.442	13.779	0.004	0.004				
MDV	Winter	DIURN	Diurnal	—	g/hr	0.082								
MDV	Winter	HOTSOAK	Hot Soak	—	g/start	0.090								
MDV	Winter	RUNLOSS	Running Loss	—	g/hr	1.239								
MDV	Winter	RUNEX	Running Exhaust/Brake & Tire Wear	5	g/mi	0.080	0.172	1.638	0.008	0.008	0.016	0.005	0.30	0.08
MDV	Winter	RUNEX	Running Exhaust/Brake & Tire Wear	10	g/mi	0.051	0.148	1.470	0.005	0.005	0.018	0.006	0.30	0.08
MDV	Winter	RUNEX	Running Exhaust/Brake & Tire Wear	15	g/mi	0.034	0.130	1.317	0.004	0.003	0.020	0.006	0.30	0.08
MDV	Winter	RUNEX	Running Exhaust/Brake & Tire Wear	20	g/mi	0.024	0.115	1.190	0.003	0.002	0.023	0.007	0.30	0.08
MDV	Winter	RUNEX	Running Exhaust/Brake & Tire Wear	25	g/mi	0.018	0.105	1.087	0.002	0.002	0.023	0.007	0.30	0.08
MDV	Winter	RUNEX,PMBW,PMTW	On-Site (5 mph)	Average On-site	g/mi	0.080	0.172	1.638	0.008	0.008	0.016	0.005	0.30	0.08
MDV	Winter	RUNEX,PMBW,PMTW	Off-Site (5-25 mph)	Average Off-Site Local	g/mi	0.025	0.117	1.198	0.003	0.002	0.022	0.007	0.30	0.08

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											BRAKE & TIRE WEAR		PM10	PM2.5
Vehicle	Season	Process	Process	Time / Speed	Units	ROG	NOx	CO	PM10	PM2_5	PM10	PM2_5	DUST	DUST
Passenger Vehicles	Annual	STREX	Start Exhaust	540	g/start	0.382	0.244	3.670	0.004	0.003				
Passenger Vehicles	Annual	DIURN	Diurnal	—	g/hr	0.070								
Passenger Vehicles	Annual	HOTSOAK	Hot Soak	—	g/start	0.080								
Passenger Vehicles	Annual	RUNEX,PMBW,PMTW	On -Site Running Exhaust/Brake & Tire Wear	Average On-site	g/mi	0.059	0.067	1.607	0.008	0.007	0.015	0.004	0.30	0.07
Passenger Vehicles	Annual	RUNEX,PMBW,PMTW	On -Site Running Exhaust/Brake & Tire Wear	Average Off-Site Local	g/mi	0.023	0.047	1.248	0.003	0.003	0.019	0.006	0.30	0.07
Passenger Vehicles			Start Exhaust	540	g/start	0.397	0.241	3.606	0.004	0.003				
Passenger Vehicles	Summer	DIURN	Diurnal	—	g/hr	0.095								
Passenger Vehicles	Summer	HOTSOAK	Hot Soak	—	g/start	0.088								
Passenger Vehicles	Summer	RUNEX,PMBW,PMTW	On -Site Running Exhaust/Brake & Tire Wear	Average On-site	g/mi	0.063	0.067	2.407	0.008	0.007	0.015	0.004	0.30	0.08
Passenger Vehicles	Summer	RUNEX,PMBW,PMTW	On -Site Running Exhaust/Brake & Tire Wear	Average Off-Site Local	g/mi	0.024	0.047	1.874	0.003	0.003	0.019	0.006	0.30	0.08
Passenger Vehicles	Winter	STREX	Start Exhaust	540	g/start	0.841	0.196	6.691	0.002	0.002				
Passenger Vehicles	Winter	DIURN	Diurnal	—	g/hr	0.066								
Passenger Vehicles	Winter	HOTSOAK	Hot Soak	—	g/start	0.418								
Passenger Vehicles	Winter	RUNEX,PMBW,PMTW	On -Site Running Exhaust/Brake & Tire Wear	Average On-site	g/mi	0.048	0.103	1.247	0.006	0.006	0.015	0.005	0.300	0.075
Passenger Vehicles	Winter	RUNEX,PMBW,PMTW	On -Site Running Exhaust/Brake & Tire Wear	Average Off-Site Local	g/mi	0.031	0.089	1.125	0.004	0.004	0.017	0.005	0.300	0.075

Notes:

1) Car Idle emissions are not included in EMFAC2021 for light duty vehicles because these emissions are included in the on-road running exhaust emissions which refer to tailpipe emissions while vehicle is traveling on the road, including at speed and idling that occur at normal driving, such as at intersections.
3) Car start emissions are based on a soak time of 540 minutes or 9 hours. (warehouse trips)
4) Passenger Vehicle On-Site Emissions based on speeds <10 mph - using 5 mph
5) Passenger Vehicle and Off-Site Truck off-site emissions are based on an average of speeds 5 to 25 mph.

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EMFAC2021 v1.02 Emission Factors - Annual - Project Level for Trucks (Kern-San Joaquin 2028 - First Year of Operation)

Vehicle	Season	Process ID	Process	Time / Speed	Units	ROG	NOx	CO	PM10	PM2_5	PM10_BWTW	PM2.5_BWTW	PM10_DUST	PM2.5_DUST
MHDT	Annual	STREX	Start Exhaust	60	g/start	0.072	1.716	1.478	0.000	0.000				
MHDT	Annual	IDLEX	Idle Exhaust	--	g/idle-hour	0.798	27.441	24.793	0.029	0.028				
MHDT	Annual	RUNEX	Running Exhaust + Brake and Tire Wear	5	g/mi	0.119	2.266	0.563	0.014	0.013	0.072	0.024	0.30	0.07
MHDT	Annual	RUNEX	Running Exhaust + Brake and Tire Wear	10	g/mi	0.074	1.716	0.433	0.011	0.011	0.072	0.024	0.30	0.07
MHDT	Annual	RUNEX	Running Exhaust + Brake and Tire Wear	15	g/mi	0.039	1.197	0.322	0.008	0.007	0.072	0.024	0.30	0.07
MHDT	Annual	RUNEX	Running Exhaust + Brake and Tire Wear	20	g/mi	0.022	0.946	0.261	0.005	0.005	0.071	0.024	0.30	0.07
MHDT	Annual	RUNEX	Running Exhaust + Brake and Tire Wear	25	g/mi	0.016	0.766	0.224	0.004	0.004	0.061	0.020	0.30	0.07
MHDT	Annual	RUNEX,PMBW,PMTW	Running Exhaust + Brake and Tire Wear	Average On-site	g/mi	0.119	2.266	0.563	0.014	0.013	0.072	0.024	0.30	0.07
MHDT	Annual	RUNEX,PMBW,PMTW	Running Exhaust + Brake and Tire Wear	Average Off-Site	g/mi	0.054	1.378	0.361	0.008	0.008	0.070	0.023	0.30	0.07
HHDT	Annual	STREX	Start Exhaust	60	g/start	0.000	7.880	0.001	0.000	0.000				
HHDT	Annual	IDLEX	Idle Exhaust	--	g/idle-hour	2.315	25.482	34.497	0.011	0.010				
HHDT	Annual	RUNEX	Running Exhaust + Brake and Tire Wear	5	g/mi	0.115	9.577	1.295	0.011	0.011	0.175	0.058	0.30	0.07
HHDT	Annual	RUNEX	Running Exhaust + Brake and Tire Wear	10	g/mi	0.064	6.784	0.838	0.009	0.009	0.175	0.058	0.30	0.07
HHDT	Annual	RUNEX	Running Exhaust + Brake and Tire Wear	15	g/mi	0.031	4.397	0.490	0.007	0.007	0.173	0.057	0.30	0.07
HHDT	Annual	RUNEX	Running Exhaust + Brake and Tire Wear	20	g/mi	0.019	3.322	0.345	0.006	0.006	0.170	0.056	0.30	0.07
HHDT	Annual	RUNEX	Running Exhaust + Brake and Tire Wear	25	g/mi	0.014	2.548	0.271	0.005	0.005	0.167	0.055	0.30	0.07
HHDT	Annual	RUNEX,PMBW,PMTW	Running Exhaust + Brake and Tire Wear	Average On-site	g/mi	0.115	9.577	1.295	0.011	0.011	0.175	0.058	0.30	0.07
HHDT	Annual	RUNEX,PMBW,PMTW	Running Exhaust + Brake and Tire Wear	Average Off-Site	g/mi	0.048	5.326	0.648	0.008	0.007	0.172	0.057	0.30	0.07

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Vehicle	Season	Process ID	Process	Time / Speed	Units	ROG	CO	NOx	PM10	PM2_5	PM10_BWTW	PM2.5_BWTW	PM10_DUST	PM2.5_DUST
MHDT	Summer	STREX	Start Exhaust	60	g/start	0.072	1.717	1.486	0.000	0.000				
MHDT	Summer	IDLEX	Idle Exhaust	--	g/idle-hour	0.804	26.416	23.141	0.025	0.024				
MHDT	Summer	RUNEX	Running Exhaust + Brake and Tire Wear	5	g/mi	0.119	2.185	0.564	0.014	0.013	0.072	0.024	0.30	0.07
MHDT	Summer	RUNEX	Running Exhaust + Brake and Tire Wear	10	g/mi	0.074	1.655	0.434	0.011	0.011	0.072	0.024	0.30	0.07
MHDT	Summer	RUNEX	Running Exhaust + Brake and Tire Wear	15	g/mi	0.039	1.155	0.322	0.008	0.007	0.072	0.024	0.30	0.07
MHDT	Summer	RUNEX	Running Exhaust + Brake and Tire Wear	20	g/mi	0.022	0.912	0.261	0.005	0.005	0.071	0.024	0.30	0.07
MHDT	Summer	RUNEX	Running Exhaust + Brake and Tire Wear	25	g/mi	0.016	0.738	0.224	0.004	0.004	0.061	0.020	0.30	0.07
MHDT	Summer	RUNEX,PMBW,PMTW	Running Exhaust + Brake and Tire Wear	Average On-site	g/mi	0.119	2.185	0.564	0.014	0.013	0.072	0.024	0.30	0.07
MHDT	Summer	RUNEX,PMBW,PMTW	Running Exhaust + Brake and Tire Wear	Average Off-Site	g/mi	0.054	1.329	0.361	0.008	0.008	0.070	0.023	0.30	0.07
HHDT	Summer	STREX	Start Exhaust	60	g/start	0.000	7.880	0.001	0.000	0.000				
HHDT	Summer	IDLEX	Idle Exhaust	--	g/idle-hour	2.452	24.238	34.048	0.009	0.009				
HHDT	Summer	RUNEX	Running Exhaust + Brake and Tire Wear	5	g/mi	0.115	9.241	1.295	0.011	0.011	0.175	0.058	0.30	0.07
HHDT	Summer	RUNEX	Running Exhaust + Brake and Tire Wear	10	g/mi	0.064	6.546	0.838	0.009	0.009	0.175	0.058	0.30	0.07
HHDT	Summer	RUNEX	Running Exhaust + Brake and Tire Wear	15	g/mi	0.031	4.243	0.490	0.007	0.007	0.173	0.057	0.30	0.07
HHDT	Summer	RUNEX	Running Exhaust + Brake and Tire Wear	20	g/mi	0.019	3.206	0.345	0.006	0.006	0.170	0.056	0.30	0.07
HHDT	Summer	RUNEX	Running Exhaust + Brake and Tire Wear	25	g/mi	0.014	2.459	0.271	0.005	0.005	0.167	0.055	0.30	0.07
HHDT	Summer	RUNEX,PMBW,PMTW	Running Exhaust + Brake and Tire Wear	Average On-site	g/mi	0.115	9.241	1.295	0.011	0.011	0.175	0.058	0.30	0.07
HHDT	Summer	RUNEX,PMBW,PMTW	Running Exhaust + Brake and Tire Wear	Average Off-Site	g/mi	0.048	5.139	0.648	0.008	0.007	0.172	0.057	0.30	0.07

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Vehicle	Season	Process ID	Process	Time / Speed	Units	ROG	CO	NOx	PM10	PM2_5	PM10_BWTW	PM2.5_BWTW	PM10_DUST	PM2.5_DUST
MHDT	Winter	STREX	Start Exhaust	60	g/start	0.079	1.744	1.516	0.000	0.000				
MHDT	Winter	IDLEX	Idle Exhaust	--	g/idle-hour	0.783	28.858	26.605	0.035	0.033				
MHDT	Winter	RUNEX	Running Exhaust + Brake and Tire Wear	5	g/mi	0.116	2.547	0.548	0.014	0.013	0.072	0.024	0.30	0.07
MHDT	Winter	RUNEX	Running Exhaust + Brake and Tire Wear	10	g/mi	0.073	1.930	0.419	0.011	0.011	0.072	0.024	0.30	0.07
MHDT	Winter	RUNEX	Running Exhaust + Brake and Tire Wear	15	g/mi	0.038	1.349	0.309	0.008	0.007	0.072	0.024	0.30	0.07
MHDT	Winter	RUNEX	Running Exhaust + Brake and Tire Wear	20	g/mi	0.022	1.066	0.250	0.005	0.005	0.071	0.024	0.30	0.07
MHDT	Winter	RUNEX	Running Exhaust + Brake and Tire Wear	25	g/mi	0.016	0.864	0.214	0.004	0.004	0.061	0.020	0.30	0.07
MHDT	Winter	RUNEX,PMBW,PMTW	Running Exhaust + Brake and Tire Wear	Average On-site	g/mi	0.116	2.547	0.548	0.014	0.013	0.072	0.024	0.30	0.07
MHDT	Winter	RUNEX,PMBW,PMTW	Running Exhaust + Brake and Tire Wear	Average Off-Site	g/mi	0.053	1.551	0.348	0.008	0.008	0.070	0.023	0.30	0.07
HHDT	Winter	STREX	Start Exhaust	60	g/start	0.000	7.880	0.001	0.000	0.000				
HHDT	Winter	IDLEX	Idle Exhaust	--	g/idle-hour	2.125	27.200	35.118	0.012	0.012				
HHDT	Winter	RUNEX	Running Exhaust + Brake and Tire Wear	5	g/mi	0.115	10.717	1.295	0.011	0.011	0.175	0.058	0.30	0.07
HHDT	Winter	RUNEX	Running Exhaust + Brake and Tire Wear	10	g/mi	0.064	7.593	0.837	0.009	0.009	0.175	0.058	0.30	0.07
HHDT	Winter	RUNEX	Running Exhaust + Brake and Tire Wear	15	g/mi	0.031	4.921	0.489	0.007	0.007	0.173	0.057	0.30	0.07
HHDT	Winter	RUNEX	Running Exhaust + Brake and Tire Wear	20	g/mi	0.019	3.718	0.345	0.006	0.006	0.170	0.056	0.30	0.07
HHDT	Winter	RUNEX	Running Exhaust + Brake and Tire Wear	25	g/mi	0.014	2.851	0.271	0.005	0.005	0.167	0.055	0.30	0.07
HHDT	Winter	RUNEX,PMBW,PMTW	Running Exhaust + Brake and Tire Wear	Average On-site	g/mi	0.115	10.717	1.295	0.011	0.011	0.175	0.058	0.30	0.07
HHDT	Winter	RUNEX,PMBW,PMTW	Running Exhaust + Brake and Tire Wear	Average Off-Site	g/mi	0.048	5.960	0.647	0.008	0.007	0.172	0.057	0.30	0.07

Airport Commerce Center Industrial Project

EMFAC2021 v1.02 Emission Factors - Annual - Project Level for Trucks (Kern-San Joaquin 2028 - First Year of Operation)

Vehicle	Season	Process ID	Process	Time / Speed	Units	ROG	CO	NOx	PM10	PM2_5	PM10_BWTW	PM2.5_BWTW	PM10_DUST	PM2.5_DUST
Trucks	Annual	STREX	Start Exhaust	60	g/start	0.029	5.433	0.587	0.000	0.000	0	0	0	0
Trucks	Annual	IDLEX	Idle Exhaust	—	g/idle-hour	1.712	26.260	30.645	**0.018**	0.017	0.000	0.000	0	0
Trucks	Annual	RUNEX	Running Exhaust + Brake and Tire Wear	5	g/mi	0.116	6.674	1.005	0.012	0.012	0.134	0.044	0.30	0.07
Trucks	Annual	RUNEX	Running Exhaust + Brake and Tire Wear	10	g/mi	0.068	4.772	0.677	0.010	0.010	0.134	0.044	0.30	0.07
Trucks	Annual	RUNEX	Running Exhaust + Brake and Tire Wear	15	g/mi	0.034	3.127	0.423	0.007	0.007	0.133	0.044	0.30	0.07
Trucks	Annual	RUNEX	Running Exhaust + Brake and Tire Wear	20	g/mi	0.020	2.379	0.312	0.006	0.005	0.131	0.043	0.30	0.07
Trucks	Annual	RUNEX	Running Exhaust + Brake and Tire Wear	25	g/mi	0.015	1.840	0.252	0.005	0.005	0.125	0.041	0.30	0.07
Trucks	Annual	RUNEX,PMBW,PMTW	Running Exhaust + Brake and Tire Wear	Average On-site	g/mi	0.116	6.674	1.005	**0.012**	0.012	0.134	0.044	0.30	0.07
Trucks	Annual	RUNEX,PMBW,PMTW	Running Exhaust + Brake and Tire Wear	Average Off-Site	g/mi	0.051	3.758	0.534	**0.008**	0.008	0.131	0.043	0.30	0.07

Vehicle	Season	Process ID	Process	Time / Speed	Units	ROG	CO	NOx	PM10	PM2_5	PM10_BWTW	PM2.5_BWTW	PM10_DUST	PM2.5_DUST
Trucks	Summer	STREX	Start Exhaust	60	g/start	0.029	5.433	0.590	0.000	0.000	0.000	0.000	0.000	0.000
Trucks	Summer	IDLEX	Idle Exhaust	—	g/idle-hour	1.797	25.103	29.718	0.016	0.015	0.000	0.000	0.000	0.000
Trucks	Summer	RUNEX	Running Exhaust + Brake and Tire Wear	5	g/mi	0.116	6.440	1.005	0.012	0.012	0.134	0.044	0.297	0.074
Trucks	Summer	RUNEX	Running Exhaust + Brake and Tire Wear	10	g/mi	0.068	4.605	0.677	0.010	0.010	0.134	0.044	0.297	0.074
Trucks	Summer	RUNEX	Running Exhaust + Brake and Tire Wear	15	g/mi	0.034	3.017	0.423	0.007	0.007	0.133	0.044	0.297	0.074
Trucks	Summer	RUNEX	Running Exhaust + Brake and Tire Wear	20	g/mi	0.020	2.295	0.312	0.006	0.005	0.131	0.043	0.297	0.074
Trucks	Summer	RUNEX	Running Exhaust + Brake and Tire Wear	25	g/mi	0.015	1.776	0.252	0.005	0.005	0.125	0.041	0.297	0.074
Trucks	Summer	RUNEX,PMBW,PMTW	Running Exhaust + Brake and Tire Wear	Average On-site	g/mi	0.116	6.440	1.005	0.012	0.012	0.134	0.044	0.297	0.074
Trucks	Summer	RUNEX,PMBW,PMTW	Running Exhaust + Brake and Tire Wear	Average Off-Site	g/mi	0.051	3.626	0.534	0.008	0.008	0.131	0.043	0.297	0.074

Vehicle	Season	Process ID	Process	Time / Speed	Units	ROG	CO	NOx	PM10	PM2_5	PM10_BWTW	PM2.5_BWTW	PM10_DUST	PM2.5_DUST
Trucks	Winter	STREX	Start Exhaust	60		0.031	5.444	0.602	0.000	0.000	0.000	0.000	0.000	0.000
Trucks	Winter	IDLEX	Idle Exhaust	—		1.592	27.858	31.738	0.021	0.020	0.000	0.000	0.000	0.000
Trucks	Winter	RUNEX	Running Exhaust + Brake and Tire Wear	5		0.115	7.474	0.998	0.012	0.012	0.134	0.044	0.297	0.074
Trucks	Winter	RUNEX	Running Exhaust + Brake and Tire Wear	10		0.067	5.345	0.671	0.010	0.010	0.134	0.044	0.297	0.074
Trucks	Winter	RUNEX	Running Exhaust + Brake and Tire Wear	15		0.034	3.503	0.418	0.007	0.007	0.133	0.044	0.297	0.074
Trucks	Winter	RUNEX	Running Exhaust + Brake and Tire Wear	20		0.020	2.665	0.307	0.006	0.005	0.131	0.043	0.297	0.074
Trucks	Winter	RUNEX	Running Exhaust + Brake and Tire Wear	25		0.015	2.062	0.248	0.005	0.005	0.125	0.041	0.297	0.074
Trucks	Winter	RUNEX,PMBW,PMTW	Running Exhaust + Brake and Tire Wear	Average On-site		0.115	7.474	0.998	0.012	0.012	0.134	0.044	0.297	0.074
Trucks	Winter	RUNEX,PMBW,PMTW	Running Exhaust + Brake and Tire Wear	Average Off-Site		0.050	4.210	0.528	0.008	0.008	0.131	0.043	0.297	0.074

Airport Commerce Center

Modeled- Area Sources

AERMod and HARP Source Inputs

					Area Source Release Parameters					
Description	Location	Source ID	Source Group ID	Area (m^2)	Release Height (m)	Initial Vertical Dimension (Sigma Z)	AERMOD Area Source Emissions g/m^2-s	AERMOD Source Emission Rate (g/s)	HARP SRCID	HARP Emissions (lb/yr)
On-Site Truck Travel	Entire Site	ONSITE	ONSITE	445,975	3.89	3.62	2.24E-06	1	ONSITE	**3.23**

On-site roadway travel treated with same release height and intitial vertical dimensions as line-volume sources

Since it is occurs in multiple diffuse areas over the entire site, it is modeled as a sitewide area source with an intial source release height to account for the exhaust plume rise

Release height and Sigma Z is based on exhaust height of 15 ft

Airport Commerce Center

Modeled- Area Sources

AERMod and HARP Source Inputs

Source Type	Location	Source ID	Source Group ID	Truck Exhaust Height (m)	Plume Height (m)	Release Height (m)	Source Width (m)	Initial Lateral Dimension (Sigma Y)	Initial Vertical Dimension (Sigma Z)	AERMOD Rate (g/s)	HARP SRCID	HARP (lb/yr)
Route 1 - Via Airport Drive - Merle Haggard West	Off-Site Roadways	OFFSITE1	OFFSITE1	4.57	7.77	3.89	26	12.09	3.62	1	OFFSITE1	4.79
Route 2 - Via Petrol Way - Landings Way - Merle Haggard West	Off-Site Roadways	OFFSITE2	OFFSITE2	4.57	7.77	3.89	26	12.09	3.62	1	OFFSITE2	1.60
Notes:												**6.39**

Truck Plume Height = 1.7 x Exhaust Release Height

Truck Width is set at 8.5 feet (2.6m) based on CalTrans legal limits. -->

Release Height for Truck Exhaust = Plume Height/2

Initial Lateral Dimension Sigma Y = Length (m)/4.3

Initial Vertical Dimension SigmaZ = Height (m)/2.15

Off-Site Travel conservatively assigned emissions that account for different routes and overstate the emissons to consider different local travel routes

Assumed that 75% of trucks utilize Route 1 and 25% Utilize Route 2. Any truck that enters along Merle Haggard will be incorporated in these routes.

Airport Commerce Center

Modeled- Area Sources

AERMod and HARP Source Inputs

				Point Source Release Parameters[1,2]									Source Emissions[3,4]	
Point Source ID	Modeled Source (s)	Location	Source Group	# Docks Doors	Fraction of Source Group	Modeled Emissions Per Source Emissions[1,2] (g/s)	Stack Height (ft)	Stack Height (m)	Exhaust Temperature (K)	Stack Diameter (m)	Exit Velocity (m/s)	Flow Rate (m^3/s)	HARP SRC ID	Unmitigated Emissions HARP (lbs/yr)	Mitigated Emissions HARP (lbs/yr)
IDLEX-01	Idling Trucks	Building 1 - South	DOCKS1	7	0.1556	0.1556	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-02	Idling Trucks	Building 1 - South	DOCKS1	8	0.1778	0.1778	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-03	Idling Trucks	Building 1 - South	DOCKS1	8	0.1778	0.1778	12.6	3.84	366	0.10	51.71	0.4061	DOCK1	0.32	0.32
IDLEX-04	Idling Trucks	Building 1 - South	DOCKS1	8	0.1778	0.1778	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-05	Idling Trucks	Building 1 - South	DOCKS1	8	0.1778	0.1778	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-06	Idling Trucks	Building 1 - South	DOCKS1	6	0.1333	0.1333	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-07	Idling Trucks	Building 2 - South	DOCKS2	7	0.1556	0.1556	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-08	Idling Trucks	Building 2 - South	DOCKS2	8	0.1778	0.1778	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-09	Idling Trucks	Building 2 - South	DOCKS2	8	0.1778	0.1778	12.6	3.84	366	0.10	51.71	0.4061	DOCK2	0.19	0.19
IDLEX-10	Idling Trucks	Building 2 - South	DOCKS2	8	0.1778	0.1778	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-11	Idling Trucks	Building 2 - South	DOCKS2	8	0.1778	0.1778	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-12	Idling Trucks	Building 2 - South	DOCKS2	6	0.1333	0.1333	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-13	Idling Trucks	Building 3 - West	DOCKS3	6	0.300	0.3000	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-14	Idling Trucks	Building 3 - West	DOCKS3	8	0.400	0.4000	12.6	3.84	366	0.10	51.71	0.4061	DOCK3	0.18	0.18
IDLEX-15	Idling Trucks	Building 3 - West	DOCKS3	6	0.300	0.3000	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-16	Idling Trucks	Building 4 - NorthWest	DOCK4-NW	7	0.167	0.1667	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-17	Idling Trucks	Building 4 - NorthWest	DOCK4-NW	7	0.167	0.1667	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-18	Idling Trucks	Building 4 - NorthWest	DOCK4-NW	7	0.167	0.1667	12.6	3.84	366	0.10	51.71	0.4061	DOCK4_NW	0.28	0.28
IDLEX-19	Idling Trucks	Building 4 - NorthWest	DOCK4-NW	7	0.167	0.1667	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-20	Idling Trucks	Building 4 - NorthWest	DOCK4-NW	7	0.167	0.1667	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-21	Idling Trucks	Building 4 - NorthWest	DOCK4-NW	7	0.167	0.1667	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-22	Idling Trucks	Building 4 - NorthEast	DOCK4-NE	7	0.206	0.2059	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-23	Idling Trucks	Building 4 - NorthEast	DOCK4-NE	7	0.206	0.2059	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-24	Idling Trucks	Building 4 - NorthEast	DOCK4-NE	7	0.206	0.2059	12.6	3.84	366	0.10	51.71	0.4061	DOCK4_NE	0.28	0.28
IDLEX-25	Idling Trucks	Building 4 - NorthEast	DOCK4-NE	7	0.206	0.2059	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-26	Idling Trucks	Building 4 - NorthEast	DOCK4-NE	6	0.176	0.1765	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-27	Idling Trucks	Building 4 - SouthWest	DOCK4-SW	4	0.103	0.1026	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-28	Idling Trucks	Building 4 - SouthWest	DOCK4-SW	7	0.179	0.1795	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-29	Idling Trucks	Building 4 - SouthWest	DOCK4-SW	7	0.179	0.1795	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-30	Idling Trucks	Building 4 - SouthWest	DOCK4-SW	7	0.179	0.1795	12.6	3.84	366	0.10	51.71	0.4061	DOCK4_SW	0.28	0.28
IDLEX-31	Idling Trucks	Building 4 - SouthWest	DOCK4-SW	7	0.179	0.1795	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-32	Idling Trucks	Building 4 - SouthWest	DOCK4-SW	7	0.179	0.1795	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-33	Idling Trucks	Building 4 - SouthEast	DOCK4-SE	7	0.175	0.1750	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-34	Idling Trucks	Building 4 - SouthEast	DOCK4-SE	7	0.175	0.1750	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-35	Idling Trucks	Building 4 - SouthEast	DOCK4-SE	7	0.175	0.1750	12.6	3.84	366	0.10	51.71	0.4061	DOCK4_SE	0.28	0.28
IDLEX-36	Idling Trucks	Building 4 - SouthEast	DOCK4-SE	7	0.175	0.1750	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-37	Idling Trucks	Building 4 - SouthEast	DOCK4-SE	7	0.175	0.1750	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-38	Idling Trucks	Building 4 - SouthEast	DOCK4-SE	5	0.125	0.1250	12.6	3.84	366	0.10	51.71	0.4061			

Airport Commerce Center

Modeled- Area Sources

AERMod and HARP Source Inputs

							Point Source Release Parameters[1,2]							Source Emissions[3,4]	
Point Source ID	Modeled Source (s)	Location	Source Group	# Docks Doors	Fraction of Source Group	Modeled Emissions Per Source Emissions[1,2] (g/s)	Stack Height (ft)	Stack Height (m)	Exhaust Temperature (K)	Stack Diameter (m)	Exit Velocity (m/s)	Flow Rate (m^3/s)	HARP SRC ID	Unmitigated Emissions HARP (lbs/yr)	Mitigated Emissions HARP (lbs/yr)
TRU-16	TRU Exhaust	Building 4 - NorthWest	TRU4-NW	7	0.167	0.1667	13.0	3.96	501	0.04445	49	0.07604			
TRU-17	TRU Exhaust	Building 4 - NorthWest	TRU4-NW	7	0.167	0.1667	13.0	3.96	501	0.04445	49	0.07604			
TRU-18	TRU Exhaust	Building 4 - NorthWest	TRU4-NW	7	0.167	0.1667	13.0	3.96	501	0.04445	49	0.07604	TRU_4_NW	-	-
TRU-19	TRU Exhaust	Building 4 - NorthWest	TRU4-NW	7	0.167	0.1667	13.0	3.96	501	0.04445	49	0.07604			
TRU-20	TRU Exhaust	Building 4 - NorthWest	TRU4-NW	7	0.167	0.1667	13.0	3.96	501	0.04445	49	0.07604			
TRU-21	TRU Exhaust	Building 4 - NorthWest	TRU4-NW	7	0.167	0.1667	13.0	3.96	501	0.04445	49	0.07604			
TRU-22	TRU Exhaust	Building 4 - NorthEast	TRU4-NE	7	0.206	0.2059	13.0	3.96	501	0.04445	49	0.07604			
TRU-23	TRU Exhaust	Building 4 - NorthEast	TRU4-NE	7	0.206	0.2059	13.0	3.96	501	0.04445	49	0.07604			
TRU-24	TRU Exhaust	Building 4 - NorthEast	TRU4-NE	7	0.206	0.2059	13.0	3.96	501	0.04445	49	0.07604	TRU_4_NE	-	-
TRU-25	TRU Exhaust	Building 4 - NorthEast	TRU4-NE	7	0.206	0.2059	13.0	3.96	501	0.04445	49	0.07604			
TRU-26	TRU Exhaust	Building 4 - NorthEast	TRU4-NE	6	0.176	0.1765	13.0	3.96	501	0.04445	49	0.07604			
TRU-27	TRU Exhaust	Building 4 - SouthWest	TRU4-SW	4	0.103	0.1026	13.0	3.96	501	0.04445	49	0.07604			
TRU-28	TRU Exhaust	Building 4 - SouthWest	TRU4-SW	7	0.179	0.1795	13.0	3.96	501	0.04445	49	0.07604			
TRU-29	TRU Exhaust	Building 4 - SouthWest	TRU4-SW	7	0.179	0.1795	13.0	3.96	501	0.04445	49	0.07604	TRU4_SW	67.47	29.49
TRU-30	TRU Exhaust	Building 4 - SouthWest	TRU4-SW	7	0.179	0.1795	13.0	3.96	501	0.04445	49	0.07604			
TRU-31	TRU Exhaust	Building 4 - SouthWest	TRU4-SW	7	0.179	0.1795	13.0	3.96	501	0.04445	49	0.07604			
TRU-32	TRU Exhaust	Building 4 - SouthWest	TRU4-SW	7	0.179	0.1795	13.0	3.96	501	0.04445	49	0.07604			
TRU-33	TRU Exhaust	Building 4 - SouthEast	TRU4-SE	7	0.175	0.1750	13.0	3.96	501	0.04445	49	0.07604			
TRU-34	TRU Exhaust	Building 4 - SouthEast	TRU4-SE	7	0.175	0.1750	13.0	3.96	501	0.04445	49	0.07604			
TRU-35	TRU Exhaust	Building 4 - SouthEast	TRU4-SE	7	0.175	0.1750	13.0	3.96	501	0.04445	49	0.07604	TRU4_SW	67.47	29.49
TRU-36	TRU Exhaust	Building 4 - SouthEast	TRU4-SE	7	0.175	0.1750	13.0	3.96	501	0.04445	49	0.07604			
TRU-37	TRU Exhaust	Building 4 - SouthEast	TRU4-SE	7	0.175	0.1750	13.0	3.96	501	0.04445	49	0.07604			
TRU-38	TRU Exhaust	Building 4 - SouthEast	TRU4-SE	5	0.125	0.1250	13.0	3.96	501	0.04445	49	0.07604			

Notes:

1. Truck Idling Parameters from San Joaquin Valley APCD Road Modeling Using AERMOD - Transcript of Presentation. Website: https://www.slideserve.com/roger/san-joaquin-valley-apcd-road-modeling-using-aermod

2. TRU Exhaust parameters San Joaquin Valley APCD Road Modeling Using AERMOD - Transcript of Presentation. Website: https://www.slideserve.com/roger/san-joaquin-valley-apcd-road-modeling-using-aermod

3. Truck emissions calculated using the traffic study truck trips, fleet mix and operational site distances/parameters using EMFAC-PL idling rates. See Particulate Matter (DPM) Emissions from Idling Trucks.

4. Emissions for TRU are based on Off-Road Emission factors for Truck and Trailer TRUs; assuming that MHDT trucks (105 per day) have Truck TRUs and HHDT Trucks (160 per day) are trailer TRUs.

Airport Commerce Center

Modeled Point Sources

							Point Source Release Parameters[3,4]								0.724
Point Source ID	Modeled Source (s)	Location	Source Group	Number of Docks Doors Represented	Fraction of Source Group	Modeled Emissions Per Source Emissions[1,2] (g/s)	Stack Height (ft)	Stack Height (m)	Exhaust Temperature (K)	Stack Diameter (m)	Exit Velocity (m/s)	Flow Rate (m^3/s)	HARP SRC ID	Unmitigated HARP (lbs/yr)	Mitigated HARP (lbs/yr)
EGEN1	Emergency Generator (300 hp)	Building 1	EGEN-01	NA	1	1.0	9.8	3	789	0.13	57.4	0.762	EGEN1	**0.724**	**0.724**
EGEN2	Emergency Generator (300 hp)	Building 2	EGEN-02	NA	1	1.0	9.8	3	789	0.13	57.4	0.762	EGEN2	**0.724**	**0.724**
EGEN3	Emergency Generator (300 hp)	Building 3	EGEN-03	NA	1			3	789	0.13	57.4	0.762	EGEN3	**0.724**	**0.724**
EGEN4-1	Emergency Generator (300 hp)	Building 4 -North East	EGEN-04	NA	1	1.0	9.8	3	789	0.13	57.4	0.762	EGEN4-1	**0.724**	**0.724**
EGEN4-2	Emergency Generator (300 hp)	Building 4 -South East	EGEN-05	NA	1	1.0	9.8	3	789	0.13	57.4	0.762	EGEN4-2	**0.724**	**0.724**
EGEN4-3	Emergency Generator (1475 hp)	Building 4 -South East	EGEN-06	NA	1	1.0	14.1	4.3	750	0.25	52.2	2.562	EGEN4-3	**4.748**	**4.748**
IDLEX-01	Idling Trucks	Building 1 - South	DOCKS1	7	0.1556	0.1556	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-02	Idling Trucks	Building 1 - South	DOCKS1	8	0.1778	0.1778	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-03	Idling Trucks	Building 1 - South	DOCKS1	8	0.1778	0.1778	12.6	3.84	366	0.10	51.71	0.4061	DOCK1	0.32	0.32
IDLEX-04	Idling Trucks	Building 1 - South	DOCKS1	8	0.1778	0.1778	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-05	Idling Trucks	Building 1 - South	DOCKS1	8	0.1778	0.1778	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-06	Idling Trucks	Building 1 - South	DOCKS1	6	0.1333	0.1333	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-07	Idling Trucks	Building 2 - South	DOCKS2	7	0.1556	0.1556	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-08	Idling Trucks	Building 2 - South	DOCKS2	8	0.1778	0.1778	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-09	Idling Trucks	Building 2 - South	DOCKS2	8	0.1778	0.1778	12.6	3.84	366	0.10	51.71	0.4061	DOCK2	0.19	0.19
IDLEX-10	Idling Trucks	Building 2 - South	DOCKS2	8	0.1778	0.1778	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-11	Idling Trucks	Building 2 - South	DOCKS2	8	0.1778	0.1778	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-12	Idling Trucks	Building 2 - South	DOCKS2	6	0.1333	0.1333	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-13	Idling Trucks	Building 3 - West	DOCKS3	6	0.300	0.3000	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-14	Idling Trucks	Building 3 - West	DOCKS3	8	0.400	0.4000	12.6	3.84	366	0.10	51.71	0.4061	DOCK3	0.18	0.18
IDLEX-15	Idling Trucks	Building 3 - West	DOCKS3	6	0.300	0.3000	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-16	Idling Trucks	Building 4 - NorthWest	DOCK4-NW	7	0.167	0.1667	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-17	Idling Trucks	Building 4 - NorthWest	DOCK4-NW	7	0.167	0.1667	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-18	Idling Trucks	Building 4 - NorthWest	DOCK4-NW	7	0.167	0.1667	12.6	3.84	366	0.10	51.71	0.4061	DOCK4_NW	0.28	0.28
IDLEX-19	Idling Trucks	Building 4 - NorthWest	DOCK4-NW	7	0.167	0.1667	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-20	Idling Trucks	Building 4 - NorthWest	DOCK4-NW	7	0.167	0.1667	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-21	Idling Trucks	Building 4 - NorthWest	DOCK4-NW	7	0.167	0.1667	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-22	Idling Trucks	Building 4 - NorthEast	DOCK4-NE	7	0.206	0.2059	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-23	Idling Trucks	Building 4 - NorthEast	DOCK4-NE	7	0.206	0.2059	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-24	Idling Trucks	Building 4 - NorthEast	DOCK4-NE	7	0.206	0.2059	12.6	3.84	366	0.10	51.71	0.4061	DOCK4_NE	0.28	0.28
IDLEX-25	Idling Trucks	Building 4 - NorthEast	DOCK4-NE	7	0.206	0.2059	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-26	Idling Trucks	Building 4 - NorthEast	DOCK4-NE	6	0.176	0.1765	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-27	Idling Trucks	Building 4 - SouthWest	DOCK4-SW	4	0.103	0.1026	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-28	Idling Trucks	Building 4 - SouthWest	DOCK4-SW	7	0.179	0.1795	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-29	Idling Trucks	Building 4 - SouthWest	DOCK4-SW	7	0.179	0.1795	12.6	3.84	366	0.10	51.71	0.4061	DOCK4_SW	0.28	0.28
IDLEX-30	Idling Trucks	Building 4 - SouthWest	DOCK4-SW	7	0.179	0.1795	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-31	Idling Trucks	Building 4 - SouthWest	DOCK4-SW	7	0.179	0.1795	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-32	Idling Trucks	Building 4 - SouthWest	DOCK4-SW	7	0.179	0.1795	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-33	Idling Trucks	Building 4 - SouthEast	DOCK4-SE	7	0.175	0.1750	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-34	Idling Trucks	Building 4 - SouthEast	DOCK4-SE	7	0.175	0.1750	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-35	Idling Trucks	Building 4 - SouthEast	DOCK4-SE	7	0.175	0.1750	12.6	3.84	366	0.10	51.71	0.4061	DOCK4_SE	0.28	0.28
IDLEX-36	Idling Trucks	Building 4 - SouthEast	DOCK4-SE	7	0.175	0.1750	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-37	Idling Trucks	Building 4 - SouthEast	DOCK4-SE	7	0.175	0.1750	12.6	3.84	366	0.10	51.71	0.4061			
IDLEX-38	Idling Trucks	Building 4 - SouthEast	DOCK4-SE	5	0.125	0.1250	12.6	3.84	366	0.10	51.71	0.4061			
TRU-16	TRU Exhaust	Building 4 - NorthWest	TRU4-NW	7	0.167	0.1667	13.0	3.96	501	0.04445	49.1	0.07619			
TRU-17	TRU Exhaust	Building 4 - NorthWest	TRU4-NW	7	0.167	0.1667	13.0	3.96	501	0.04445	49.1	0.07619			
TRU-18	TRU Exhaust	Building 4 - NorthWest	TRU4-NW	7	0.167	0.1667	13.0	3.96	501	0.04445	49.1	0.07619	TRU_4_NW	-	-
TRU-19	TRU Exhaust	Building 4 - NorthWest	TRU4-NW	7	0.167	0.1667	13.0	3.96	501	0.04445	49.1	0.07619			
TRU-20	TRU Exhaust	Building 4 - NorthWest	TRU4-NW	7	0.167	0.1667	13.0	3.96	501	0.04445	49.1	0.07619			
TRU-21	TRU Exhaust	Building 4 - NorthWest	TRU4-NW	7	0.167	0.1667	13.0	3.96	501	0.04445	49.1	0.07619			
TRU-22	TRU Exhaust	Building 4 - NorthEast	TRU4-NE	7	0.206	0.2059	13.0	3.96	501	0.04445	49.1	0.07619			
TRU-23	TRU Exhaust	Building 4 - NorthEast	TRU4-NE	7	0.206	0.2059	13.0	3.96	501	0.04445	49.1	0.07619			
TRU-24	TRU Exhaust	Building 4 - NorthEast	TRU4-NE	7	0.206	0.2059	13.0	3.96	501	0.04445	49.1	0.07619	TRU_4_NE	-	-
TRU-25	TRU Exhaust	Building 4 - NorthEast	TRU4-NE	7	0.206	0.2059	13.0	3.96	501	0.04445	49.1	0.07619			
TRU-26	TRU Exhaust	Building 4 - NorthEast	TRU4-NE	6	0.176	0.1765	13.0	3.96	501	0.04445	49.1	0.07619			
TRU-27	TRU Exhaust	Building 4 - SouthWest	TRU4-SW	4	0.103	0.1026	13.0	3.96	501	0.04445	49.1	0.07619			
TRU-28	TRU Exhaust	Building 4 - SouthWest	TRU4-SW	7	0.179	0.1795	13.0	3.96	501	0.04445	49.1	0.07619			
TRU-29	TRU Exhaust	Building 4 - SouthWest	TRU4-SW	7	0.179	0.1795	13.0	3.96	501	0.04445	49.1	0.07619	TRU4_SW	67.47	29.49
TRU-30	TRU Exhaust	Building 4 - SouthWest	TRU4-SW	7	0.179	0.1795	13.0	3.96	501	0.04445	49.1	0.07619			
TRU-31	TRU Exhaust	Building 4 - SouthWest	TRU4-SW	7	0.179	0.1795	13.0	3.96	501	0.04445	49.1	0.07619			
TRU-32	TRU Exhaust	Building 4 - SouthWest	TRU4-SW	7	0.179	0.1795	13.0	3.96	501	0.04445	49.1	0.07619			
TRU-33	TRU Exhaust	Building 4 - SouthEast	TRU4-SE	7	0.175	0.1750	13.0	3.96	501	0.04445	49.1	0.07619			
TRU-34	TRU Exhaust	Building 4 - SouthEast	TRU4-SE	7	0.175	0.1750	13.0	3.96	501	0.04445	49.1	0.07619			
TRU-35	TRU Exhaust	Building 4 - SouthEast	TRU4-SE	7	0.175	0.1750	13.0	3.96	501	0.04445	49.1	0.07619	TRU4_SW	67.47	29.49
TRU-36	TRU Exhaust	Building 4 - SouthEast	TRU4-SE	7	0.175	0.1750	13.0	3.96	501	0.04445	49.1	0.07619			
TRU-37	TRU Exhaust	Building 4 - SouthEast	TRU4-SE	7	0.175	0.1750	13.0	3.96	501	0.04445	49.1	0.07619			
TRU-38	TRU Exhaust	Building 4 - SouthEast	TRU4-SE	5	0.125	0.1250	13.0	3.96	501	0.04445	49.1	0.07619			

Notes:

1. Source Emissions for trucks calculated using the traffic study truck trips, fleet mix and operational emissions using EMFAC-PL idling rates. See Particulate Matter (DPM) Emissions from Idling Trucks.

2. Emissions for emergency generators are consistent with CalEEMod based on SJVAPCD BACT requirements of Tier 4 Final EF of 0.015 g/bhp-hr for maintenance and testing operations (50 hours) plus 50 hours of emergency usage for 100 hours total averaged over year.

3. Truck Idling Parameters from San Joaquin Valley APCO Road Modeling Using AERMOD - Transcript of Presentation

Website: https://www.slideserve.com/roger/san-joaquin-valley-apcd-road-modeling-using-aermod

4. Exhaust parameters are based on horizontal release, using parameters based on Engine HP from ARB/CAPCOA Diesel Internal Combustion Engine Risk Tool User Guide , July 2024. https://capcoa.org/wp-content/uploads/2024/07/DICE-Tool-User-Guide.pdf

Notes:

Truck Plume Height = 1.7 x Exhaust Release Height

Truck Width is set at 8.5 feet (2.6m) based on CalTrans legal limits. -->

Release Height for Truck Exhaust = Plume Height/2

Initial Lateral Dimension Sigma Y = Length (m)/4.3

Initial Vertical Dimension SigmaZ = Height (m)/2.15

Off-Site Travel conservatively assigned emissions that account for different routes and overstate the emissons to consider different local travel routes

Conservatively Assume that 100% of Trips use Route 1 and 100% Use Route 2

Airport Commerce Center

Emergency Generator - TACs

DPM Emissions from Emergency Generators

Source_ID	Building	Generator Size (hp)	hours per year	Load Factor	PM10 (g/bhp-hr)	lbs/year DPM	
EGEN-1	1			0.73	0.015	0.724	
EGEN-2	2	300	100	0.73	0.015	0.724	
EGEN-3	3	300	100	0.73	0.015	0.724	
EGEN-4	4	300	100	0.73	0.015	0.724	
EGEN-5	4	300	100	0.73	0.015	0.724	
EGEN-6	4	1475	100	0.73	0.02	4.748	
						8.369	lb/yr
						0.00418	tons/yr

Airport Commerce Center Industrial Project

Transport Refrigeration Unit Emission Factors

Model Output: Off-Road Web Query (v1.1.0) Emissions Inventory - Kern (SJV) 2028 Exhaust Emissions

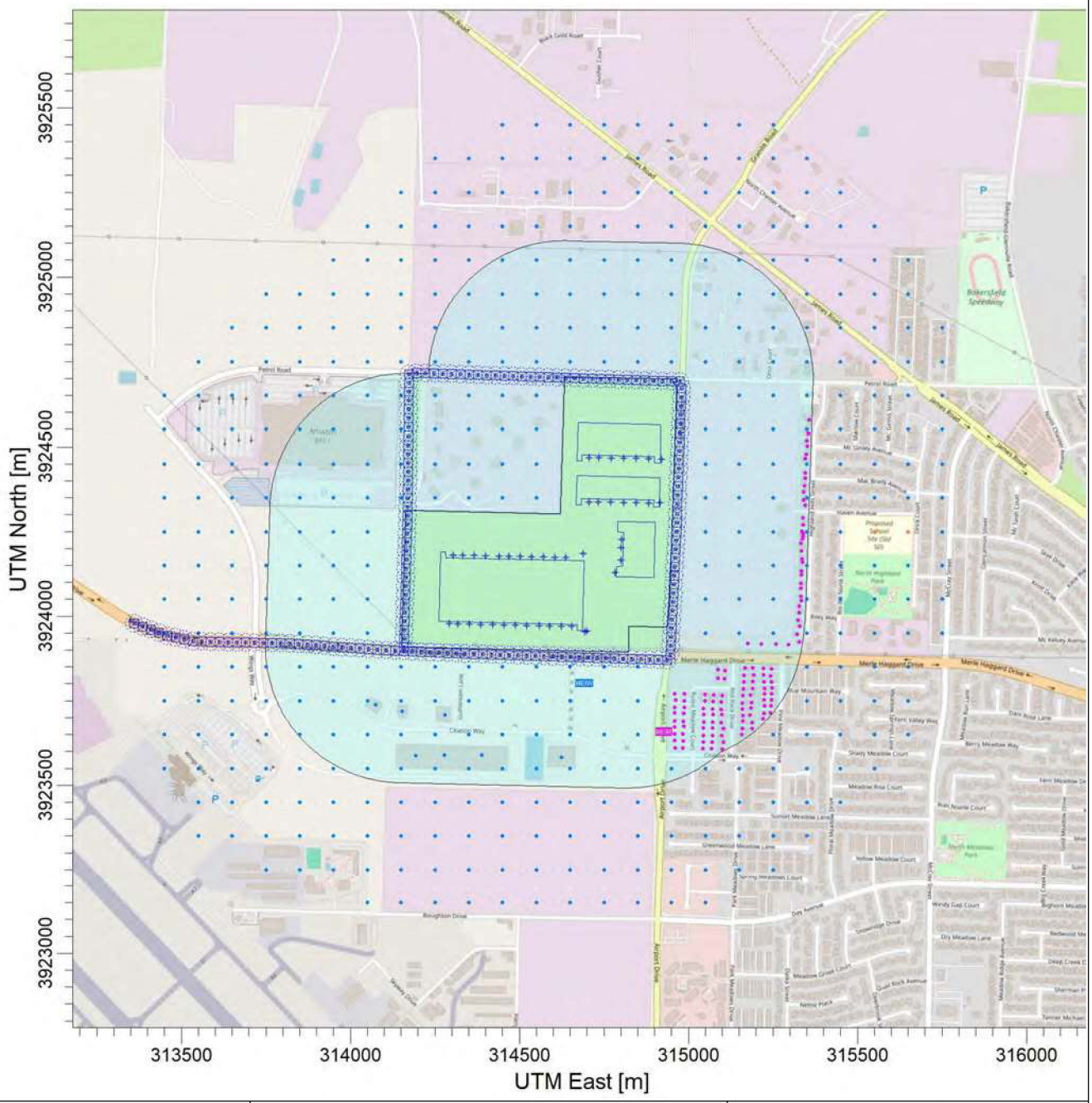
Units	Truck Type	Units	Avg Hrs/Day	Units	ROG	NOx	CO	SOx	PM10E	PM2_5E	CO2e
Truck TRU	MHDT	lb/hr	0.9	lb per operating hour	0.0073	0.0778	0.0067	0.0001	0.0040	0.0037	12.4334
Trailer TRU	HHDT	lb/hr	1.6	lb per operating hour	**0.012**	0.08	**0.011**	**0.000**	0.0014	0.0013	15.5968

Trailer TRU Emissions are based on Instate and Out of State Trailers
Truck TRU Emissions are only reported for Instate Trailers
See Additional Calculations from WebQuery Data for dervation of hourly emission rates for TRUs.
Average Hours per Unit for the Inventory are Included for Reference.

Model Output: Off-Road Web Query (v1.1.0) Emissions Inventory
Region Type: Sub-Area
Region: Kern (SJV)
Calendar Year: 2028
Scenario: All Adopted Rules - Exhaust
Vehicle Classification: Off-Road Web Query Equipment Types
Units: tons/day for Emissions, gallons/year for Fuel, hours/year for Activity, Horsepower-hours/year for Horsepower-hours

Region	Calendar Ye	Vehicle Category	Model Year	Horsepower B	Fuel	HC_tpd	ROG_tpd	TOG_tpd	CO_tpd	NOx_tpd	CO2_tpd	PM10_tpd	PM2.5_tpd	SOx_tpd	NH3_tpd	Fuel Consumpti	Total_Activity_H	Total_Population
Kern (SJV)	2028	Transport Refrigeration Unit - Instate Trailer	Aggregate	Aggregate	Diesel	0.07133799	0.08529	0.101502	0.079308	0.58168			0.0086054	0.001109	2.62E-06	3804730.33	5397748.65	3009.76
Kern (SJV)	2028	Transport Refrigeration Unit - Instate Truck	Aggregate	Aggregate	Diesel	0.00181862	0.002202	0.002621	0.002022	0.023492	3.756003	0.0012088	0.00111137	3.56E-05	8.42E-08	122170.65	220525.66	648.53
Kern (SJV)	2028	Transport Refrigeration Unit - Out-Of-State Trailer	Aggregate	Aggregate	Diesel	0.040949045	0.049547	0.058965	0.045484	0.351479	64.90172	0.00708593	0.00652537	0.000615	1.46E-06	2111043.49	3114772.06	11451.18

Airport Commerce Center
Operational HRA - Source and Receptor Locations



Source Legend:

- Site
- Point Source
- Truck Route
- Building
- 0.25-Mile Buffer

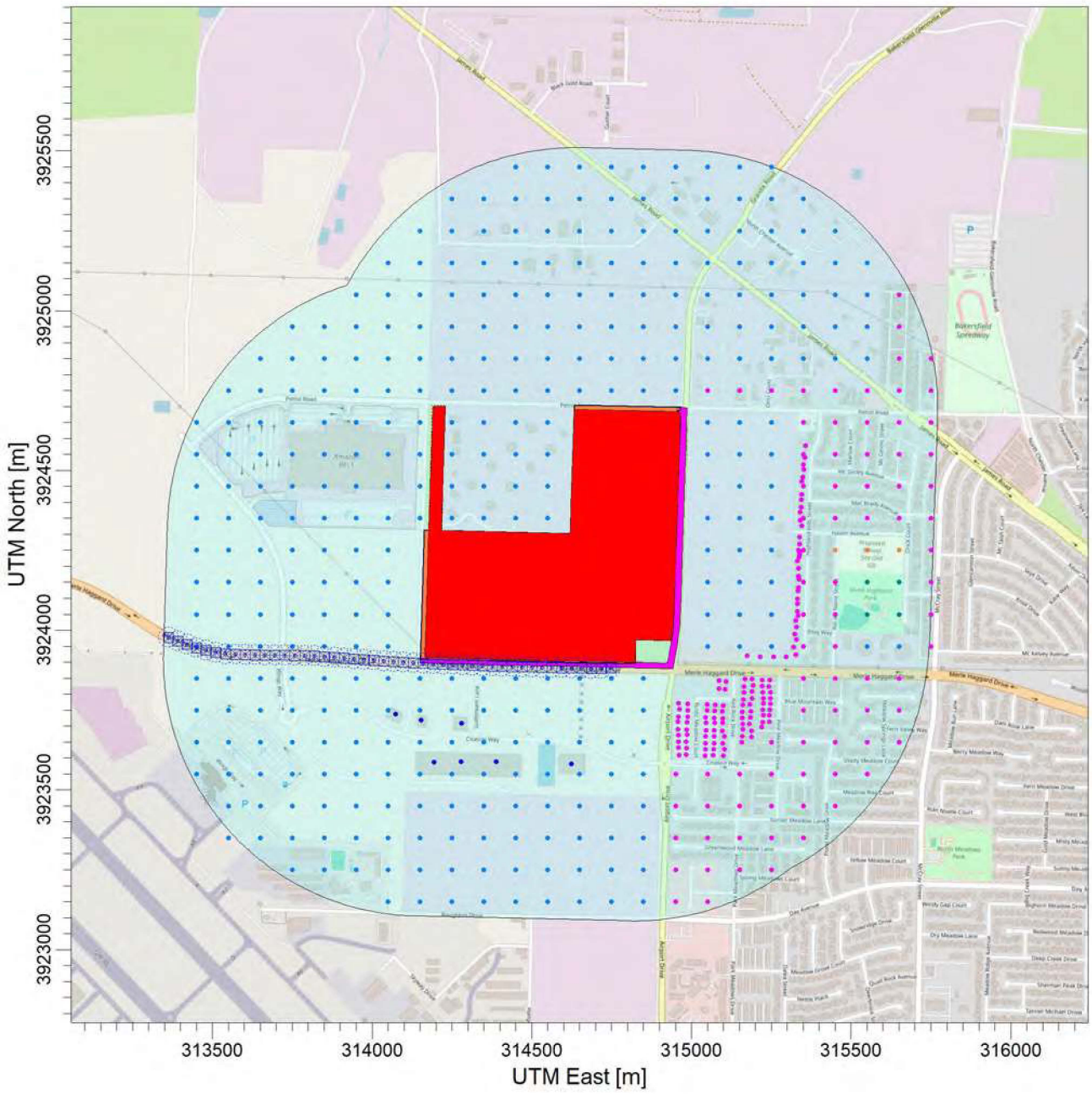
Receptor Legend:

- Residential Receptor
- Receptor Grid
- Maximally Exposed Individual Resident (MEIR)

FCS
An ADEC Innovation

PROJECT TITLE:

Airport Commerce Center Industrial Project
AERMOD Source and Receptors - 1/2 Mile Modeling Domain



COMMENTS:	SOURCES: **2**		
	RECEPTORS: **552**		
		SCALE: 1:20,000 0 0.5 km	
			PROJECT NO.:

AERMOD View - Lakes Environmental Software

Control Pathway

AERMOD

Dispersion Options

Titles

Airport Commerce Center Industrial Project
Construction HRA - Unity Emissions for HARP2 ADMRT

Dispersion Options

☑ Regulatory Default ☐ Non-Default Options

Dispersion Coefficient

Rural

Output Type

☑ Concentration
☐ Total Deposition (Dry & Wet)
☐ Dry Deposition
☐ Wet Deposition

Plume Depletion

☐ Dry Removal
☐ Wet Removal

Output Warnings

☐ No Output Warnings
☐ Non-fatal Warnings for Non-sequential Met Data

Pollutant / Averaging Time / Terrain Options

Pollutant Type

PM10

Averaging Time Options

Hours ☑ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 6 ☐ 8 ☐ 12 ☐ 24

☐ Month ☑ Period ☐ Annual

Exponential Decay

Option not available

Terrain Height Options

☐ Flat ☑ Elevated

SO: Meters
RE: Meters
TG: Meters

Flagpole Receptors

☐ Yes ☑ No

Default Height = 0.00 m

Control Pathway

Optional Files

Re-Start File	Init File	Multi-Year Analyses	Event Input File	Error Listing File
☐	☐	☐	☐	■

Detailed Error Listing File

Filename: ConHRA.err

Source Pathway - Source Inputs

AERMOD

Polygon Area Sources

Source Type: AREA POLY

Source: SITE (Construction Exhaust)

Base Elevation (Optional)	Release Height [m]	Emission Rate [g/ (s-m^2)]	Initial Vertical Dim. [m]	Number of Vertices (or sides)	X Coordinate for Vertices [m]	Y Coordinate for Vertices [m]
179.78	5.00	2.25E-6	1.40	12	314620.83	3924301.65
		2.25E-6			314219.08	3924312.09
		2.25E-6			314223.46	3924514.06
		2.25E-6			314226.60	3924704.67
		2.25E-6			314187.11	3924704.18
		2.25E-6			314167.06	3923910.62
		2.25E-6			314825.07	3923900.81
		2.25E-6			314826.28	3923970.99
		2.25E-6			314938.97	3923967.52
		2.25E-6			314955.77	3924320.27
		2.25E-6			314964.19	3924680.52
		2.25E-6			314634.17	3924690.97

Line Volume Sources

Source Type: LINE VOLUME

Source: ROAD (Merle Haggard Blvd)

Length of Side [m]	Emission Rate [g/ s]	Building Height [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
31.00	1.00000		313348.42	3923982.85	157.37	3.89
			313458.41	3923942.04	157.82	3.89
			313532.92	3923926.08	158.69	3.89
			313655.33	3923922.53	160.91	3.89
			313807.90	3923920.75	163.17	3.89
			314049.17	3923903.01	166.59	3.89
			314130.78	3923897.69	167.57	3.89
			314395.11	3923887.05	171.51	3.89
			314724.90	3923879.47	175.34	3.89
			314777.05	3923885.82	176.14	3.89

Source Pathway - Source Inputs

AERMOD

Volume Sources Generated from Line Sources

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
ROAD	L0000001	313362.95	3923977.45	157.43	3.89	0.02174	31.00		14.42	3.62
	L0000002	313392.01	3923966.67	157.55	3.89	0.02174	31.00		14.42	3.62
	L0000003	313421.08	3923955.89	157.67	3.89	0.02174	31.00		14.42	3.62
	L0000004	313450.14	3923945.11	157.79	3.89	0.02174	31.00		14.42	3.62
	L0000005	313480.10	3923937.39	158.07	3.89	0.02174	31.00		14.42	3.62
	L0000006	313510.41	3923930.90	158.43	3.89	0.02174	31.00		14.42	3.62
	L0000007	313540.90	3923925.84	158.83	3.89	0.02174	31.00		14.42	3.62
	L0000008	313571.88	3923924.95	159.40	3.89	0.02174	31.00		14.42	3.62
	L0000009	313602.87	3923924.05	159.96	3.89	0.02174	31.00		14.42	3.62
	L0000010	313633.86	3923923.15	160.52	3.89	0.02174	31.00		14.42	3.62
	L0000011	313664.85	3923922.42	161.05	3.89	0.02174	31.00		14.42	3.62
	L0000012	313695.85	3923922.06	161.51	3.89	0.02174	31.00		14.42	3.62
	L0000013	313726.84	3923921.70	161.97	3.89	0.02174	31.00		14.42	3.62
	L0000014	313757.84	3923921.34	162.43	3.89	0.02174	31.00		14.42	3.62
	L0000015	313788.84	3923920.97	162.89	3.89	0.02174	31.00		14.42	3.62
	L0000016	313819.81	3923919.88	163.34	3.89	0.02174	31.00		14.42	3.62
	L0000017	313850.72	3923917.60	163.78	3.89	0.02174	31.00		14.42	3.62
	L0000018	313881.64	3923915.33	164.22	3.89	0.02174	31.00		14.42	3.62
	L0000019	313912.56	3923913.06	164.65	3.89	0.02174	31.00		14.42	3.62
	L0000020	313943.47	3923910.78	165.09	3.89	0.02174	31.00		14.42	3.62
	L0000021	313974.39	3923908.51	165.53	3.89	0.02174	31.00		14.42	3.62
	L0000022	314005.31	3923906.24	165.97	3.89	0.02174	31.00		14.42	3.62
	L0000024	314067.15	3923901.84	166.81	3.89	0.02174	31.00		14.42	3.62

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
ROAD	L0000025	314098.08	3923899.82	167.18	3.89	0.02174	31.00		14.42	3.62
	L0000026	314129.02	3923897.81	167.55	3.89	0.02174	31.00		14.42	3.62
	L0000027	314159.99	3923896.51	168.01	3.89	0.02174	31.00		14.42	3.62
	L0000028	314190.97	3923895.27	168.47	3.89	0.02174	31.00		14.42	3.62
	L0000029	314221.94	3923894.02	168.93	3.89		31.00		14.42	3.62
						0.02174				
	L0000031	314283.89	3923891.52	169.85	3.89	0.02174	31.00		14.42	3.62
	L0000032	314314.86	3923890.28	170.31	3.89	0.02174	31.00		14.42	3.62
	L0000033	314345.84	3923889.03	170.78	3.89	0.02174	31.00		14.42	3.62
	L0000034	314376.81	3923887.78	171.24	3.89	0.02174	31.00		14.42	3.62
	L0000035	314407.80	3923886.75	171.66	3.89	0.02174	31.00		14.42	3.62
	L0000036	314438.79	3923886.04	172.02	3.89	0.02174	31.00		14.42	3.62
	L0000037	314469.78	3923885.33	172.38	3.89	0.02174	31.00		14.42	3.62
	L0000038	314500.77	3923884.62	172.74	3.89	0.02174	31.00		14.42	3.62
	L0000039	314531.76	3923883.91	173.10	3.89	0.02174	31.00		14.42	3.62
	L0000040	314562.76	3923883.20	173.46	3.89	0.02174	31.00		14.42	3.62
	L0000041	314593.75	3923882.48	173.82	3.89	0.02174	31.00		14.42	3.62
	L0000042	314624.74	3923881.77	174.18	3.89	0.02174	31.00		14.42	3.62
	L0000043	314655.73	3923881.06	174.54	3.89	0.02174	31.00		14.42	3.62
	L0000044	314686.72	3923880.35	174.90	3.89	0.02174	31.00		14.42	3.62
	L0000045	314717.71	3923879.64	175.26	3.89	0.02174	31.00		14.42	3.62
	L0000046	314748.54	3923882.35	175.70	3.89	0.02174	31.00		14.42	3.62

Source Pathway

Building Downwash Information

Option not in use

Emission Rate Units for Output

For Concentration

Unit Factor:	1E6
Emission Unit Label:	GRAMS/SEC
Concentration Unit Label:	MICROGRAMS/M**3

Source Groups

Source Group ID:	List of Sources in Group (Source Range or Single Sources)
ROAD	ROAD
ONSITE	SITE
DPM	ROAD
ALL	All Sources Included

Variable Emissions

Hour-of-Day / Day-of-Week Emission Rate Variation

Scenario: Scenario 1

Source ID: **ROAD**

Weekdays								
	Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
		7 - 12	0.00	0.00	4.20	4.20	4.20	4.20
		13 - 18	0.00	4.20	4.20	4.20	4.20	0.00
		19 - 24	0.00	0.00	0.00	0.00	0.00	0.00
Saturday								
	Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
		7 - 12	0.00	0.00	0.00	0.00	0.00	0.00
		13 - 18	0.00	0.00	0.00	0.00	0.00	0.00
		19 - 24	0.00	0.00	0.00	0.00	0.00	0.00
Sunday								
	Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
		7 - 12	0.00	0.00	0.00	0.00	0.00	0.00
		13 - 18	0.00	0.00	0.00	0.00	0.00	0.00
		19 - 24	0.00	0.00	0.00	0.00	0.00	0.00
:								
Weekdays								
	Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
		7 - 12	0.00	0.00	4.20	4.20	4.20	4.20
		13 - 18	0.00	4.20	4.20	4.20	4.20	0.00
		19 - 24	0.00	0.00	0.00	0.00	0.00	0.00
Saturday								
	Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
		7 - 12	0.00	0.00	0.00	0.00	0.00	0.00
		13 - 18	0.00	0.00	0.00	0.00	0.00	0.00
		19 - 24	0.00	0.00	0.00	0.00	0.00	0.00
Sunday								
	Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
		7 - 12	0.00	0.00	0.00	0.00	0.00	0.00
		13 - 18	0.00	0.00	0.00	0.00	0.00	0.00
		19 - 24	0.00	0.00	0.00	0.00	0.00	0.00

Receptor Pathway

Receptor Networks

Note: Terrain Elavations and Flagpole Heights for Network Grids are in Page RE2 - 1 (If applicable)
Generated Discrete Receptors for Multi-Tier (Risk) Grid and Receptor Locations for Fenceline Grid are in Page RE3 - 1 (If applicable)

Discrete Receptors

Discrete Cartesian Receptors

Record Number	X-Coordinate [m]	Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations	Flagpole Heights [m] (Optional)
1	314050.00	3923150.00	UCART1	155.96	
2	314150.00	3923150.00	UCART1	157.61	
3	314250.00	3923150.00	UCART1	158.43	
4	314350.00	3923150.00	UCART1	159.63	
5	314450.00	3923150.00	UCART1	160.95	
6	314550.00	3923150.00	UCART1	162.53	
7	314650.00	3923150.00	UCART1	163.79	
8	314750.00	3923150.00	UCART1	164.79	
9	314850.00	3923150.00	UCART1	165.50	
10	314950.00	3923150.00	RES	167.40	
11	315050.00	3923150.00	RES	167.79	
12	313750.00	3923250.00	UCART1	153.72	
13	313850.00	3923250.00	UCART1	154.65	
14	313950.00	3923250.00	UCART1	156.28	
15	314050.00	3923250.00	UCART1	157.55	
16	314150.00	3923250.00	UCART1	158.92	
17	314250.00	3923250.00	UCART1	160.04	
18	314350.00	3923250.00	UCART1	161.26	
19	314450.00	3923250.00	UCART1	162.41	
20	314550.00	3923250.00	UCART1	163.67	
21	314650.00	3923250.00	UCART1	165.21	
22	314750.00	3923250.00	UCART1	166.57	
23	314850.00	3923250.00	UCART1	167.65	
24	314950.00	3923250.00	RES	169.09	
25	315050.00	3923250.00	RES	169.21	
26	315150.00	3923250.00	RES	169.07	
27	315250.00	3923250.00	RES	169.64	
28	313550.00	3923350.00	UCART1	152.12	
29	313650.00	3923350.00	UCART1	153.72	
30	313750.00	3923350.00	UCART1	155.04	

31	313850.00	3923350.00	UCART1	156.68
32	313950.00	3923350.00	UCART1	157.53
33	314050.00	3923350.00	UCART1	158.65
34	314150.00	3923350.00	UCART1	160.26
35	314250.00	3923350.00	UCART1	161.48
36	314350.00	3923350.00	UCART1	162.51
37	314450.00	3923350.00	UCART1	163.72
38	314550.00	3923350.00	UCART1	165.07
39	314650.00	3923350.00	UCART1	166.34
40	314750.00	3923350.00	UCART1	167.97
41	314850.00	3923350.00	UCART1	169.27
42	314950.00	3923350.00	RES	170.62
43	315050.00	3923350.00	RES	170.91
44	315150.00	3923350.00	RES	170.90
45	315250.00	3923350.00	RES	171.59
46	315350.00	3923350.00	RES	172.31
47	313550.00	3923450.00	UCART1	153.26
48	313650.00	3923450.00	UCART1	155.74
49	313750.00	3923450.00	UCART1	156.52
50	313850.00	3923450.00	UCART1	157.38
51	313950.00	3923450.00	UCART1	158.64
52	314050.00	3923450.00	UCART1	158.58
53	314150.00	3923450.00	UCART1	161.59
54	314250.00	3923450.00	UCART1	162.94
55	314350.00	3923450.00	UCART1	164.06
56	314450.00	3923450.00	UCART1	165.25
57	314550.00	3923450.00	UCART1	166.61
58	314650.00	3923450.00	UCART1	167.75
59	314750.00	3923450.00	UCART1	169.04
60	314850.00	3923450.00	UCART1	170.66
61	314950.00	3923450.00	RES	172.44
62	315050.00	3923450.00	RES	172.77
63	315150.00	3923450.00	RES	173.01
64	315250.00	3923450.00	RES	173.54
65	315350.00	3923450.00	RES	174.82
66	315450.00	3923450.00	RES	176.17
67	313450.00	3923550.00	UCART1	153.44
68	313550.00	3923550.00	UCART1	156.78

69	313650.00	3923550.00	UCART1	156.31
70	313750.00	3923550.00	UCART1	157.78
71	313850.00	3923550.00	UCART1	159.29
72	313950.00	3923550.00	UCART1	160.61
73	314050.00	3923550.00	UCART1	162.03
74	314150.00	3923550.00	UCART1	165.57
75	314250.00	3923550.00	UCART1	165.67
76	314350.00	3923550.00	UCART1	165.65
77	314450.00	3923550.00	UCART1	165.70
78	314550.00	3923550.00	UCART1	163.44
79	314650.00	3923550.00	UCART1	169.47
80	314750.00	3923550.00	UCART1	171.65
81	314850.00	3923550.00	UCART1	172.38
82	314950.00	3923550.00	RES	174.95
83	315050.00	3923550.00	RES	174.91
84	315150.00	3923550.00	RES	175.06
85	315250.00	3923550.00	RES	175.94
86	315350.00	3923550.00	RES	176.30
87	315450.00	3923550.00	RES	177.53
88	315550.00	3923550.00	RES	177.93
89	313450.00	3923650.00	UCART1	156.19
90	313550.00	3923650.00	UCART1	156.21
91	313650.00	3923650.00	UCART1	157.38
92	313750.00	3923650.00	UCART1	159.78
93	313850.00	3923650.00	UCART1	160.44
94	313950.00	3923650.00	UCART1	161.97
95	314050.00	3923650.00	UCART1	163.59
96	314150.00	3923650.00	UCART1	165.01
97	314250.00	3923650.00	UCART1	165.85
98	314350.00	3923650.00	UCART1	167.02
99	314450.00	3923650.00	UCART1	168.24
100	314550.00	3923650.00	UCART1	169.45
101	314650.00	3923650.00	UCART1	170.68
102	314750.00	3923650.00	UCART1	172.21
103	314850.00	3923650.00	UCART1	173.21
104	315250.00	3923650.00	RES	178.19
105	315350.00	3923650.00	RES	177.87
106	315450.00	3923650.00	RES	177.68

107	315550.00	3923650.00	RES	179.91
108	315650.00	3923650.00	RES	180.12
109	313450.00	3923750.00	UCART1	155.94
110	313550.00	3923750.00	UCART1	157.90
111	313650.00	3923750.00	UCART1	159.16
112	313750.00	3923750.00	UCART1	160.80
113	313850.00	3923750.00	UCART1	161.46
114	313950.00	3923750.00	UCART1	163.22
115	314050.00	3923750.00	UCART1	164.37
116	314150.00	3923750.00	UCART1	165.31
117	314250.00	3923750.00	UCART1	166.95
118	314350.00	3923750.00	UCART1	168.76
119	314450.00	3923750.00	UCART1	169.97
120	314550.00	3923750.00	UCART1	171.06
121	314650.00	3923750.00	UCART1	172.31
122	314750.00	3923750.00	UCART1	173.72
123	314850.00	3923750.00	UCART1	174.88
124	315350.00	3923750.00	RES	180.89
125	315450.00	3923750.00	RES	181.59
126	315550.00	3923750.00	RES	181.29
127	315650.00	3923750.00	RES	181.44
128	313450.00	3923850.00	UCART1	156.59
129	313550.00	3923850.00	UCART1	158.27
130	313650.00	3923850.00	UCART1	159.88
131	313750.00	3923850.00	UCART1	161.37
132	313850.00	3923850.00	UCART1	162.83
133	313950.00	3923850.00	UCART1	164.11
134	314050.00	3923850.00	UCART1	165.75
135	314150.00	3923850.00	UCART1	166.98
136	314250.00	3923850.00	UCART1	168.65
137	314350.00	3923850.00	UCART1	170.25
138	314450.00	3923850.00	UCART1	171.34
139	314550.00	3923850.00	UCART1	172.76
140	314650.00	3923850.00	UCART1	174.01
141	314750.00	3923850.00	UCART1	175.23
142	314850.00	3923850.00	UCART1	176.51
143	315350.00	3923850.00	RES	182.28
144	315450.00	3923850.00	RES	182.72

145	315550.00	3923850.00	RES	183.17
146	315650.00	3923850.00	RES	183.68
147	313450.00	3923950.00	UCART1	157.78
148	313550.00	3923950.00	UCART1	158.84
149	313650.00	3923950.00	UCART1	160.63
150	313750.00	3923950.00	UCART1	162.37
151	313850.00	3923950.00	UCART1	164.19
152	313950.00	3923950.00	UCART1	165.88
153	314050.00	3923950.00	UCART1	167.42
154	315050.00	3923950.00	UCART1	180.64
155	315150.00	3923950.00	UCART1	181.85
156	315250.00	3923950.00	UCART1	182.70
157	315350.00	3923950.00	RES	183.58
158	315450.00	3923950.00	RES	184.09
159	315550.00	3923950.00	UCART1	184.86
160	315650.00	3923950.00	UCART1	185.42
161	315750.00	3923950.00	RES	186.22
162	313450.00	3924050.00	UCART1	158.27
163	313550.00	3924050.00	UCART1	159.51
164	313650.00	3924050.00	UCART1	162.08
165	313750.00	3924050.00	UCART1	162.61
166	313850.00	3924050.00	UCART1	165.12
167	313950.00	3924050.00	UCART1	166.28
168	314050.00	3924050.00	UCART1	167.95
169	315050.00	3924050.00	UCART1	182.41
170	315150.00	3924050.00	UCART1	183.61
171	315250.00	3924050.00	UCART1	184.25
172	315350.00	3924050.00	RES	185.28
173	315450.00	3924050.00	RES	185.70
174	315550.00	3924050.00	POS	186.08
175	315650.00	3924050.00	POS	187.78
176	315750.00	3924050.00	RES	187.07
177	313450.00	3924150.00	UCART1	159.52
178	313550.00	3924150.00	UCART1	157.05
179	313650.00	3924150.00	UCART1	163.09
180	313750.00	3924150.00	UCART1	163.83
181	313850.00	3924150.00	UCART1	165.59
182	313950.00	3924150.00	UCART1	167.32

183	314050.00	3924150.00	UCART1	169.08
184	315050.00	3924150.00	UCART1	184.65
185	315150.00	3924150.00	UCART1	185.51
186	315250.00	3924150.00	UCART1	186.31
187	315350.00	3924150.00	RES	187.14
188	315450.00	3924150.00	RES	187.49
189	315550.00	3924150.00	POS	188.01
190	315650.00	3924150.00	POS	188.75
191	315750.00	3924150.00	RES	189.16
192	313450.00	3924250.00	UCART1	162.56
193	313550.00	3924250.00	UCART1	163.08
194	313650.00	3924250.00	UCART1	163.08
195	313750.00	3924250.00	UCART1	164.89
196	313850.00	3924250.00	UCART1	166.60
197	313950.00	3924250.00	UCART1	168.33
198	314050.00	3924250.00	UCART1	170.05
199	315050.00	3924250.00	UCART1	185.32
200	315150.00	3924250.00	UCART1	186.86
201	315250.00	3924250.00	UCART1	188.22
202	315350.00	3924250.00	RES	188.91
203	315450.00	3924250.00	SCHOOL	189.46
204	315550.00	3924250.00	SCHOOL	189.43
205	315650.00	3924250.00	SCHOOL	190.90
206	315750.00	3924250.00	RES	191.29
207	313450.00	3924350.00	UCART1	163.06
208	313550.00	3924350.00	UCART1	163.06
209	313650.00	3924350.00	UCART1	164.02
210	313750.00	3924350.00	UCART1	164.65
211	313850.00	3924350.00	UCART1	168.88
212	313950.00	3924350.00	UCART1	169.34
213	314050.00	3924350.00	UCART1	169.52
214	314150.00	3924350.00	UCART1	172.91
215	314250.00	3924350.00	UCART1	174.80
216	314350.00	3924350.00	UCART1	176.89
217	314450.00	3924350.00	UCART1	177.77
218	314550.00	3924350.00	UCART1	179.17
219	315050.00	3924350.00	UCART1	187.14
220	315150.00	3924350.00	UCART1	188.71

221	315250.00	3924350.00	UCART1	190.11
222	315350.00	3924350.00	RES	190.94
223	315450.00	3924350.00	RES	191.34
224	315550.00	3924350.00	RES	192.31
225	315650.00	3924350.00	RES	193.35
226	315750.00	3924350.00	RES	193.19
227	313450.00	3924450.00	UCART1	163.05
228	313550.00	3924450.00	UCART1	163.67
229	313650.00	3924450.00	UCART1	165.27
230	313750.00	3924450.00	UCART1	170.84
231	313850.00	3924450.00	UCART1	169.86
232	313950.00	3924450.00	UCART1	170.03
233	314050.00	3924450.00	UCART1	169.82
234	314150.00	3924450.00	UCART1	171.43
235	314250.00	3924450.00	UCART1	176.07
236	314350.00	3924450.00	UCART1	176.57
237	314450.00	3924450.00	UCART1	178.46
238	314550.00	3924450.00	UCART1	180.62
239	315050.00	3924450.00	UCART1	188.69
240	315150.00	3924450.00	UCART1	190.26
241	315250.00	3924450.00	UCART1	191.52
242	315350.00	3924450.00	RES	193.02
243	315450.00	3924450.00	RES	193.79
244	315550.00	3924450.00	RES	194.48
245	315650.00	3924450.00	RES	194.89
246	315750.00	3924450.00	RES	195.29
247	313450.00	3924550.00	UCART1	163.88
248	313550.00	3924550.00	UCART1	163.90
249	313650.00	3924550.00	UCART1	167.66
250	313750.00	3924550.00	UCART1	170.87
251	313850.00	3924550.00	UCART1	170.52
252	313950.00	3924550.00	UCART1	170.55
253	314050.00	3924550.00	UCART1	170.29
254	314150.00	3924550.00	UCART1	170.57
255	314250.00	3924550.00	UCART1	177.22
256	314350.00	3924550.00	UCART1	178.81
257	314450.00	3924550.00	UCART1	180.07
258	314550.00	3924550.00	UCART1	181.72

259	315050.00	3924550.00	UCART1	189.73
260	315150.00	3924550.00	UCART1	190.88
261	315250.00	3924550.00	UCART1	192.65
262	315350.00	3924550.00	RES	194.81
263	315450.00	3924550.00	RES	194.87
264	315550.00	3924550.00	RES	196.00
265	315650.00	3924550.00	RES	196.25
266	315750.00	3924550.00	RES	197.32
267	313450.00	3924650.00	UCART1	164.97
268	313550.00	3924650.00	UCART1	165.51
269	313650.00	3924650.00	UCART1	168.07
270	313750.00	3924650.00	UCART1	170.19
271	313850.00	3924650.00	UCART1	170.64
272	313950.00	3924650.00	UCART1	170.85
273	314050.00	3924650.00	UCART1	171.12
274	314150.00	3924650.00	UCART1	172.93
275	314250.00	3924650.00	UCART1	177.64
276	314350.00	3924650.00	UCART1	180.09
277	314450.00	3924650.00	UCART1	181.85
278	314550.00	3924650.00	UCART1	183.89
279	315050.00	3924650.00	UCART1	191.31
280	315150.00	3924650.00	UCART1	192.74
281	315250.00	3924650.00	UCART1	194.24
282	315350.00	3924650.00	RES	196.29
283	315450.00	3924650.00	RES	196.58
284	315550.00	3924650.00	RES	198.11
285	315650.00	3924650.00	RES	198.16
286	315750.00	3924650.00	RES	199.09
287	313550.00	3924750.00	UCART1	166.81
288	313650.00	3924750.00	UCART1	167.62
289	313750.00	3924750.00	UCART1	169.71
290	313850.00	3924750.00	UCART1	171.32
291	313950.00	3924750.00	UCART1	172.44
292	314050.00	3924750.00	UCART1	174.42
293	314150.00	3924750.00	UCART1	175.88
294	314250.00	3924750.00	UCART1	178.03
295	314350.00	3924750.00	UCART1	180.36
296	314450.00	3924750.00	UCART1	182.71

297	314550.00	3924750.00	UCART1	184.65
298	314650.00	3924750.00	UCART1	185.86
299	314750.00	3924750.00	UCART1	187.30
300	314850.00	3924750.00	UCART1	188.84
301	314950.00	3924750.00	UCART1	190.91
302	315050.00	3924750.00	RES	191.78
303	315150.00	3924750.00	RES	194.38
304	315250.00	3924750.00	RES	195.34
305	315350.00	3924750.00	RES	197.12
306	315450.00	3924750.00	RES	198.41
307	315550.00	3924750.00	RES	199.02
308	315650.00	3924750.00	RES	199.85
309	315750.00	3924750.00	RES	202.01
310	313650.00	3924850.00	UCART1	168.85
311	313750.00	3924850.00	UCART1	170.52
312	313850.00	3924850.00	UCART1	172.70
313	313950.00	3924850.00	UCART1	174.33
314	314050.00	3924850.00	UCART1	176.33
315	314150.00	3924850.00	UCART1	177.60
316	314250.00	3924850.00	UCART1	179.00
317	314350.00	3924850.00	UCART1	180.41
318	314450.00	3924850.00	UCART1	182.40
319	314550.00	3924850.00	UCART1	185.42
320	314650.00	3924850.00	UCART1	187.60
321	314750.00	3924850.00	UCART1	189.28
322	314850.00	3924850.00	UCART1	190.71
323	314950.00	3924850.00	UCART1	192.06
324	315050.00	3924850.00	UCART1	193.70
325	315150.00	3924850.00	UCART1	194.57
326	315250.00	3924850.00	UCART1	196.72
327	315350.00	3924850.00	UCART1	198.75
328	315450.00	3924850.00	UCART1	199.69
329	315550.00	3924850.00	UCART1	200.53
330	315650.00	3924850.00	RES	201.13
331	315750.00	3924850.00	RES	202.75
332	313750.00	3924950.00	UCART1	171.33
333	313850.00	3924950.00	UCART1	173.38
334	313950.00	3924950.00	UCART1	175.72

335	314050.00	3924950.00	UCART1	177.59
336	314150.00	3924950.00	UCART1	179.42
337	314250.00	3924950.00	UCART1	181.15
338	314350.00	3924950.00	UCART1	182.71
339	314450.00	3924950.00	UCART1	183.59
340	314550.00	3924950.00	UCART1	184.96
341	314650.00	3924950.00	UCART1	188.05
342	314750.00	3924950.00	UCART1	190.23
343	314850.00	3924950.00	UCART1	192.18
344	314950.00	3924950.00	UCART1	193.55
345	315050.00	3924950.00	UCART1	195.07
346	315150.00	3924950.00	UCART1	196.43
347	315250.00	3924950.00	UCART1	198.09
348	315350.00	3924950.00	UCART1	199.99
349	315450.00	3924950.00	UCART1	201.31
350	315550.00	3924950.00	UCART1	202.35
351	315650.00	3924950.00	RES	202.85
352	313950.00	3925050.00	UCART1	176.31
353	314050.00	3925050.00	UCART1	178.50
354	314150.00	3925050.00	UCART1	180.25
355	314250.00	3925050.00	UCART1	183.46
356	314350.00	3925050.00	UCART1	185.39
357	314450.00	3925050.00	UCART1	186.12
358	314550.00	3925050.00	UCART1	187.47
359	314650.00	3925050.00	UCART1	189.28
360	314750.00	3925050.00	UCART1	190.80
361	314850.00	3925050.00	UCART1	192.40
362	314950.00	3925050.00	UCART1	194.46
363	315050.00	3925050.00	UCART1	196.31
364	315150.00	3925050.00	UCART1	198.24
365	315250.00	3925050.00	UCART1	199.34
366	315350.00	3925050.00	UCART1	200.61
367	315450.00	3925050.00	UCART1	202.30
368	315550.00	3925050.00	UCART1	203.95
369	315650.00	3925050.00	RES	204.59
370	314050.00	3925150.00	UCART1	177.65
371	314150.00	3925150.00	UCART1	179.42
372	314250.00	3925150.00	UCART1	180.01

373	314350.00	3925150.00	UCART1	180.70
374	314450.00	3925150.00	UCART1	184.18
375	314550.00	3925150.00	UCART1	186.47
376	314650.00	3925150.00	UCART1	188.28
377	314750.00	3925150.00	UCART1	192.96
378	314850.00	3925150.00	UCART1	194.28
379	314950.00	3925150.00	UCART1	197.68
380	315050.00	3925150.00	UCART1	198.85
381	315150.00	3925150.00	UCART1	199.63
382	315250.00	3925150.00	UCART1	201.23
383	315350.00	3925150.00	UCART1	201.87
384	315450.00	3925150.00	UCART1	203.40
385	315550.00	3925150.00	UCART1	205.07
386	314150.00	3925250.00	UCART1	178.99
387	314250.00	3925250.00	UCART1	179.28
388	314350.00	3925250.00	UCART1	181.18
389	314450.00	3925250.00	UCART1	183.56
390	314550.00	3925250.00	UCART1	185.98
391	314650.00	3925250.00	UCART1	188.54
392	314750.00	3925250.00	UCART1	192.60
393	314850.00	3925250.00	UCART1	196.47
394	314950.00	3925250.00	UCART1	197.87
395	315050.00	3925250.00	UCART1	197.06
396	315150.00	3925250.00	UCART1	198.46
397	315250.00	3925250.00	UCART1	200.11
398	315350.00	3925250.00	UCART1	200.22
399	315450.00	3925250.00	UCART1	205.68
400	314250.00	3925350.00	UCART1	181.91
401	314350.00	3925350.00	UCART1	182.80
402	314450.00	3925350.00	UCART1	189.72
403	314550.00	3925350.00	UCART1	191.83
404	314650.00	3925350.00	UCART1	193.21
405	314750.00	3925350.00	UCART1	196.69
406	314850.00	3925350.00	UCART1	197.06
407	314950.00	3925350.00	UCART1	198.10
408	315050.00	3925350.00	UCART1	199.03
409	315150.00	3925350.00	UCART1	202.33
410	315250.00	3925350.00	UCART1	199.99

411	315350.00	3925350.00	UCART1	202.18
412	314450.00	3925450.00	UCART1	189.93
413	314550.00	3925450.00	UCART1	193.26
414	314650.00	3925450.00	UCART1	194.72
415	314750.00	3925450.00	UCART1	196.04
416	314850.00	3925450.00	UCART1	197.41
417	314950.00	3925450.00	UCART1	199.48
418	315050.00	3925450.00	UCART1	199.93
419	315150.00	3925450.00	UCART1	200.07
420	315250.00	3925450.00	UCART1	205.03
421	315086.66	3923842.45	RES	179.05
422	315086.66	3923817.48	RES	178.79
423	315108.06	3923838.88	RES	179.04
424	315105.69	3923815.10	RES	178.77
425	315174.65	3923919.74	RES	177.90
426	315215.08	3923917.37	RES	177.95
427	315257.89	3923917.37	RES	178.12
428	315295.42	3923916.38	RES	182.78
429	315167.52	3923847.21	RES	180.82
430	315190.11	3923847.21	RES	181.07
431	315221.96	3923844.99	RES	182.13
432	315163.95	3923824.61	RES	180.78
433	315192.49	3923826.99	RES	181.07
434	315245.27	3923843.64	RES	181.95
435	315163.66	3923805.89	RES	180.07
436	315190.11	3923807.97	RES	180.38
437	315222.06	3923825.65	RES	181.92
438	315188.92	3923786.56	RES	180.25
439	315242.53	3923823.73	RES	181.81
440	315162.47	3923784.18	RES	179.94
441	314958.81	3923770.76	RES	176.92
442	314987.58	3923770.09	RES	176.82
443	314962.16	3923753.36	RES	176.53
444	314988.24	3923749.35	RES	176.24
445	314959.48	3923729.95	RES	176.44
446	314988.24	3923729.95	RES	176.19
447	314958.14	3923713.90	RES	176.18
448	314986.24	3923711.89	RES	175.91

449	314958.14	3923690.49	RES	176.11
450	314984.90	3923689.15	RES	175.85
451	314958.81	3923672.43	RES	175.79
452	314986.91	3923673.77	RES	175.61
453	314959.48	3923651.69	RES	175.75
454	314983.56	3923651.02	RES	175.57
455	314959.48	3923632.96	RES	175.46
456	314984.23	3923631.62	RES	175.24
457	314960.92	3923609.80	RES	175.42
458	314983.56	3923610.22	RES	175.22
459	315048.45	3923768.08	RES	177.42
460	315074.53	3923766.74	RES	177.94
461	315099.28	3923765.40	RES	178.42
462	315049.11	3923749.35	RES	176.59
463	315073.19	3923747.34	RES	176.86
464	315096.61	3923746.01	RES	178.00
465	315044.43	3923727.28	RES	176.34
466	315070.44	3923725.94	RES	176.63
467	315097.27	3923724.60	RES	177.94
468	315045.77	3923709.89	RES	176.06
469	315072.53	3923709.89	RES	176.34
470	315097.94	3923709.89	RES	177.43
471	315045.10	3923686.47	RES	175.95
472	315071.19	3923687.14	RES	176.24
473	315095.94	3923685.81	RES	177.23
474	315044.43	3923669.08	RES	175.68
475	315071.19	3923669.08	RES	176.00
476	315102.63	3923667.75	RES	176.76
477	315043.76	3923646.34	RES	175.59
478	315071.19	3923647.01	RES	175.96
479	315098.61	3923647.01	RES	176.71
480	315043.09	3923628.28	RES	175.35
481	315069.18	3923628.28	RES	175.63
482	315102.63	3923626.94	RES	176.02
483	315041.91	3923607.79	RES	175.34
484	315067.84	3923608.21	RES	175.60
485	315100.62	3923606.88	RES	176.02
486	315161.49	3923766.07	RES	179.22

487	315183.56	3923767.41	RES	179.49
488	315159.90	3923743.83	RES	179.08
489	315186.24	3923745.34	RES	179.42
490	315158.99	3923725.34	RES	178.45
491	315184.90	3923727.95	RES	178.75
492	315160.15	3923706.54	RES	178.38
493	315180.89	3923707.21	RES	178.63
494	315160.15	3923690.49	RES	177.85
495	315187.58	3923685.14	RES	178.00
496	315158.81	3923668.41	RES	177.73
497	315188.25	3923667.08	RES	178.02
498	315157.48	3923649.68	RES	177.02
499	315223.03	3923805.54	RES	181.50
500	315246.44	3923804.87	RES	181.25
501	315225.03	3923786.81	RES	181.15
502	315247.11	3923787.48	RES	180.95
503	315224.37	3923770.76	RES	180.55
504	315246.44	3923770.09	RES	180.27
505	315223.03	3923752.03	RES	180.16
506	315245.77	3923752.03	RES	179.89
507	315225.03	3923734.63	RES	179.88
508	315244.43	3923734.63	RES	179.66
509	315223.03	3923712.56	RES	179.69
510	315243.09	3923713.90	RES	179.52
511	315220.35	3923696.51	RES	179.40
512	315326.99	3923924.33	RES	183.73
513	315320.46	3923947.21	RES	183.77
514	315329.17	3923971.17	RES	184.11
515	315323.73	3923987.51	RES	184.36
516	315328.08	3924010.39	RES	184.77
517	315326.99	3924030.00	RES	185.06
518	315333.53	3924045.25	RES	185.37
519	315332.44	3924059.41	RES	185.60
520	315332.44	3924082.29	RES	186.00
521	315332.44	3924097.54	RES	186.31
522	315333.53	3924123.68	RES	186.75
523	315334.62	3924134.58	RES	186.97
524	315336.80	3924159.63	RES	187.42

525	315335.71	3924169.44	RES	187.61
526	315334.62	3924193.40	RES	187.99
527	315332.44	3924216.28	RES	188.42
528	315336.80	3924229.35	RES	188.63
529	315338.98	3924244.60	RES	188.89
530	315337.89	3924236.98	RES	188.75
531	315335.71	3924251.14	RES	189.01
532	315337.89	3924269.66	RES	189.33
533	315337.89	3924291.44	RES	189.70
534	315345.51	3924327.39	RES	190.41
535	315340.07	3924343.73	RES	190.90
536	315340.07	3924368.79	RES	191.37
537	315343.34	3924385.13	RES	191.60
538	315344.42	3924408.01	RES	192.14
539	315345.51	3924424.35	RES	192.46
540	315345.51	3924465.74	RES	193.40
541	315348.78	3924478.81	RES	193.65
542	315352.05	3924502.78	RES	194.06
543	315349.87	3924518.03	RES	194.31
544	315355.32	3924539.82	RES	194.62
545	315356.41	3924577.95	RES	195.27
546	314074.41	3923738.41	NON-RES	164.65
547	314152.46	3923718.89	NON-RES	165.53
548	314280.18	3923708.25	NON-RES	166.95
549	314624.33	3923582.30	NON-RES	169.72
550	314388.39	3923589.40	NON-RES	165.79
551	314278.41	3923589.40	NON-RES	165.70
552	314193.26	3923587.62	NON-RES	165.68

Plant Boundary Receptors

Receptor Pathway

Receptor Groups

Record Number	Group ID	Group Description
1	UCART1	Receptors generated from Uniform Cartesian Grid
2	SCHOOL	
3	RES	
4	NON-RES	
5	POS	Park - Open Space
6	unknown	

Meteorology Pathway

AERMOD

Met Input Data

Surface Met Data

Filename: ..\MetData\Bakersfield_18-22.SFC
Format Type: Default AERMET format

Profile Met Data

Filename: ..\MetData\Bakersfield_18-22.PFL
Format Type: Default AERMET format

Wind Speed

☐ Wind Speeds are Vector Mean (Not Scalar Means)

Wind Direction

Rotation Adjustment [deg]:

Potential Temperature Profile

Base Elevation above MSL (for Primary Met Tower): 149.00 [m]

Meteorological Station Data

Stations	Station No.	Year	X Coordinate [m]	Y Coordinate [m]	Station Name
Surface Upper Air		2018 2018			OAKLAND/WSO AP

Data Period

Data Period to Process

Start Date: 1/1/2018 Start Hour: 1 End Date: 12/31/2022 End Hour: 24

Wind Speed Categories

Stability Category	Wind Speed [m/s]	Stability Category	Wind Speed [m/s]
A	1.54	D	8.23
B	3.09	E	10.8
C	5.14	F	No Upper Bound

Output Pathway

Tabular Printed Outputs

Short Term Averaging Period	RECTABLE Highest Values Table										MAXTABLE Maximum Values Table	DAYTABLE Daily Values Table
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th		
1	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐		No

Contour Plot Files (PLOTFILE)

Path for PLOTFILES: CONHRA.AD

Averaging Period	Source Group ID	High Value	File Name
Period	ONSITE		ONSITE_PE.PLT
1	ONSITE	1st	ONSITE_01.PLT
1	ROAD	1st	ROAD_01.PLT
Period	ROAD		ROAD_PE.PLT

Results Summary

Airport Commerce Center Industrial Project
Construction HRA - Unity Emissions for HARP2 ADMRT

PM10 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		9.72410		314750.00	3923850.00	-99.00	-99.00	-99.00	
PERIOD		0.72773		314750.00	3923850.00	-99.00	-99.00	-99.00	
PERIOD		0.72773		314750.00	3923850.00	-99.00	-99.00	-99.00	

PM10 - Concentration - Source Group: ONSITE

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		5.60542	ug/m^3	314850.00	3923850.00	176.51	0.00	176.51	
1-HR	1ST	815.67272	ug/m^3	315050.00	3924150.00	184.65	0.00	184.65	1/15/2020, 17

PM10 - Concentration - Source Group: ROAD

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	1721.70767	ug/m^3	313850.00	3923950.00	164.19	0.00	164.19	1/15/2020, 17
PERIOD		25.69428	ug/m^3	314650.00	3923850.00	174.01	0.00	174.01	

Control Pathway

AERMOD

Dispersion Options

Titles

Airport Commerce Center Industrial Project
Operational HRA for HARP ADMRT

Dispersion Options

☑ Regulatory Default ☐ Non-Default Options

Dispersion Coefficient

Rural

Output Type

☑ Concentration
☐ Total Deposition (Dry & Wet)
☐ Dry Deposition
☐ Wet Deposition

Plume Depletion

☐ Dry Removal
☐ Wet Removal

Output Warnings

☐ No Output Warnings
☐ Non-fatal Warnings for Non-sequential Met Data

Pollutant / Averaging Time / Terrain Options

Pollutant Type

PM10

Averaging Time Options

Hours: ☑ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 6 ☐ 8 ☐ 12 ☐ 24

☐ Month ☑ Period ☐ Annual

Exponential Decay

Option not available

Terrain Height Options

☐ Flat ☑ Elevated

SO: Meters
RE: Meters
TG: Meters

Flagpole Receptors

☐ Yes ☑ No

Default Height = 0.00 m

Control Pathway

Optional Files

Re-Start File	Init File	Multi-Year Analyses	Event Input File	Error Listing File
☐	☐	☐	☐	☑

Detailed Error Listing File

Filename: OpHRA.err

Source Pathway - Source Inputs

AERMOD

Point Sources

Source Type	Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation (Optional)	Release Height [m]	Emission Rate [g/s]	Gas Exit Temp. [K]	Gas Exit Velocity [m/s]	Stack Inside Diameter [m]
POINT	IDLEX_01	314706.44 Bldg 1 Docks - (7)	3924469.43	183.51	3.84	0.15556	366.00	51.71	0.10
POINT	IDLEX_02	314734.59 Building 1 Docks - (8)	3924469.03	183.92	3.84	0.17778	366.00	51.71	0.10
POINT	IDLEX_03	314771.53 Building 1 Docks - (8)	3924468.13	184.52	3.84	0.17778	366.00	51.71	0.10
POINT	IDLEX_04	314808.37 Building 1 Docks - (8)	3924467.29	185.34	3.84	0.17778	366.00	51.71	0.10
POINT	IDLEX_05	314845.75 Building 1 Docks - (8)	3924466.70	185.00	3.84	0.17778	366.00	51.71	0.10
POINT	IDLEX_06	314882.58 Building 1 Docks - (6)	3924465.77	185.61	3.84	0.13333	366.00	51.71	0.10
POINT	IDLEX_07	314705.23 Bldg 2 Docks - (7)	3924338.22	181.95	3.84	0.15556	366.00	51.71	0.10
POINT	IDLEX_08	314733.74 Bldg 2 Docks - (8)	3924337.81	181.76	3.84	0.17778	366.00	51.71	0.10
POINT	IDLEX_09	314770.35 Bldg 2 Docks - (8)	3924337.56	183.05	3.84	0.17778	366.00	51.71	0.10
POINT	IDLEX_10	314807.91 Bldg 2 Docks - (8)	3924336.03	183.63	3.84	0.17778	366.00	51.71	0.10
POINT	IDLEX_11	314844.39 Bldg 2 Docks - (8)	3924335.83	183.61	3.84	0.17778	366.00	51.71	0.10
POINT	IDLEX_12	314881.58 Bldg 2 Docks - (6)	3924335.07	184.14	3.84	0.13333	366.00	51.71	0.10

Source Pathway - Source Inputs

AERMOD

Source Type	Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation (Optional)	Release Height [m]	Emission Rate [g/s]	Gas Exit Temp. [K]	Gas Exit Velocity [m/s]	Stack Inside Diameter [m]
POINT	IDLEX_13	314801.51	3924226.74	181.67	3.84	0.30000	366.00	51.71	0.10
		Bldg 3 Docks - (6)							
POINT	IDLEX_14	314800.54	3924202.80	181.25	3.84	0.40000	366.00	51.71	0.10
		Bldg 3 Docks - (8)							
POINT	IDLEX_15	314799.87	3924165.84	180.69	3.84	0.30000	366.00	51.71	0.10
		Bldg 3 Docks - (6)							
POINT	IDLEX_16	314302.71	3924181.19	173.17	3.84	0.16667	366.00	51.71	0.10
		Bldg 4 Docks - North East (7)							
POINT	IDLEX_17	314331.61	3924179.97	173.79	3.84	0.16667	366.00	51.71	0.10
		Bldg 4 Docks - North (7)							
POINT	IDLEX_18	314366.57	3924179.84	174.36	3.84	0.16667	366.00	51.71	0.10
		Bldg 4 Docks - North (7)							
POINT	IDLEX_19	314400.14	3924178.45	174.55	3.84	0.16667	366.00	51.71	0.10
		Bldg 4 Docks - North (7)							
POINT	IDLEX_20	314440.07	3924177.94	175.62	3.84	0.16667	366.00	51.71	0.10
		Bldg 4 Docks - North (7)							
POINT	IDLEX_21	314467.84	3924177.59	176.10	3.84	0.16667	366.00	51.71	0.10
		Bldg 4 Docks - North (7)							
POINT	IDLEX_22	314502.00	3924176.61	176.84	3.84	0.20588	366.00	51.71	0.10
		Bldg 4 Docks - North (7)							
POINT	IDLEX_23	314536.13	3924175.79	177.40	3.84	0.20588	366.00	51.71	0.10
		Bldg 4 Docks - North (7)							
POINT	IDLEX_24	314571.09	3924175.98	177.88	3.84	0.20588	366.00	51.71	0.10
		Bldg 4 Docks - North (7)							
POINT	IDLEX_25	314604.73	3924174.62	178.32	3.84	0.20588	366.00	51.71	0.10
		Bldg 4 Docks - North (7)							

Source Pathway - Source Inputs

AERMOD

Source Type	Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation (Optional)	Release Height [m]	Emission Rate [g/s]	Gas Exit Temp. [K]	Gas Exit Velocity [m/s]	Stack Inside Diameter [m]
POINT	IDLEX_26	314636.89	3924174.84	178.83	3.84	0.17647	366.00	51.71	0.10
		Bldg 4 Docks - North West (6)							
POINT	IDLEX_27	314292.00	3923978.00	170.40	3.84	0.10256	366.00	51.71	0.10
		Bldg 4 Docks - South West (4)							
POINT	IDLEX_28	314318.25	3923977.19	170.95	3.84	0.17949	366.00	51.71	0.10
		Bldg 4 Docks - South (7)							
POINT	IDLEX_29	314351.55	3923976.50	171.85	3.84	0.17949	366.00	51.71	0.10
		Bldg 4 Docks - South (7)							
POINT	IDLEX_30	314385.96	3923975.48	172.59	3.84	0.17949	366.00	51.71	0.10
		Bldg 4 Docks - South (7)							
POINT	IDLEX_31	314420.46	3923975.31	173.24	3.84	0.17949	366.00	51.71	0.10
		Bldg 4 Docks - South (7)							
POINT	IDLEX_32	314453.71	3923974.01	173.62	3.84	0.17949	366.00	51.71	0.10
		Bldg 4 Docks - South (7)							
POINT	IDLEX_33	314487.55	3923973.29	174.11	3.84	0.17500	366.00	51.71	0.10
		Bldg 4 Docks - South (7)							
POINT	IDLEX_34	314521.00	3923972.00	174.55	3.84	0.17500	366.00	51.71	0.10
		Bldg 4 Docks - South (7)							
POINT	IDLEX_35	314557.66	3923972.11	174.99	3.84	0.17500	366.00	51.71	0.10
		Bldg 4 Docks - South (7)							
POINT	IDLEX_36	314589.50	3923970.88	175.34	3.84	0.17500	366.00	51.71	0.10
		Bldg 4 Docks - South (7)							
POINT	IDLEX_37	314624.36	3923970.15	175.71	3.84	0.17500	366.00	51.71	0.10
		Bldg 4 Docks - South (7)							
POINT	IDLEX_38	314653.83	3923970.66	176.06	3.84	0.12500	366.00	51.71	0.10
		Bldg 4 Docks - South East (5)							

Source Pathway - Source Inputs

AERMOD

Source Type	Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation (Optional)	Release Height [m]	Emission Rate [g/s]	Gas Exit Temp. [K]	Gas Exit Velocity [m/s]	Stack Inside Diameter [m]
POINT	TRU_16	314302.71	3924181.19	173.17	3.96	0.16670	501.00	49.00	0.04
		Bldg 4 Docks - North East (7)							
POINT	TRU_17	314331.61	3924179.97	173.79	3.96	0.16670	501.00	49.00	0.04
		Bldg 4 Docks - North (7)							
POINT	TRU_18	314366.57	3924179.84	174.36	3.96	0.16670	501.00	49.00	0.04
		Bldg 4 Docks - North (7)							
POINT	TRU_19	314400.14	3924178.45	174.55	3.96	0.16670	501.00	49.00	0.04
		Bldg 4 Docks - North (7)							
POINT	TRU_20	314440.07	3924177.94	175.62	3.96	0.16670	501.00	49.00	0.04
		Bldg 4 Docks - North (7)							
POINT	TRU_21	314467.84	3924177.59	176.10	3.96	0.16670	501.00	49.00	0.04
		Bldg 4 Docks - North (7)							
POINT	TRU_22	314502.00	3924176.61	176.84	3.96	0.20000	501.00	49.00	0.04
		Bldg 4 Docks - North (7)							
POINT	TRU_23	314536.13	3924175.79	177.40	3.96	0.20000	501.00	49.00	0.04
		Bldg 4 Docks - North (7)							
POINT	TRU_24	314571.09	3924175.98	177.88	3.96	0.20000	501.00	49.00	0.04
		Bldg 4 Docks - North (7)							
POINT	TRU_25	314604.73	3924174.62	178.32	3.96	0.20000	501.00	49.00	0.04
		Bldg 4 Docks - North (7)							
POINT	TRU_26	314636.89	3924174.84	178.83	3.96	0.20000	501.00	49.00	0.04
		Bldg 4 Docks - North West (6)							
POINT	TRU_27	314292.00	3923978.00	170.40	3.96	0.16670	501.00	49.00	0.04
		Bldg 4 Docks - South West (4)							
POINT	TRU_28	314318.25	3923977.19	170.95	3.96	0.16670	501.00	49.00	0.04
		Bldg 4 Docks - South (7)							

Source Pathway - Source Inputs

AERMOD

Source Type	Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation (Optional)	Release Height [m]	Emission Rate [g/s]	Gas Exit Temp. [K]	Gas Exit Velocity [m/s]	Stack Inside Diameter [m]
POINT	TRU_29	314351.55	3923976.50	171.85	3.96	0.16670	501.00	49.00	0.04
		Bldg 4 Docks - South (7)							
POINT	TRU_30	314385.96	3923975.48	172.59	3.96	0.16670	501.00	49.00	0.04
		Bldg 4 Docks - South (7)							
POINT	TRU_31	314420.46	3923975.31	173.24	3.96	0.16670	501.00	49.00	0.04
		Bldg 4 Docks - South (7)							
POINT	TRU_32	314453.71	3923974.01	173.62	3.96	0.16670	501.00	49.00	0.04
		Bldg 4 Docks - South (7)							
POINT	TRU_33	314487.55	3923973.29	174.11	3.96	0.16670	501.00	49.00	0.04
		Bldg 4 Docks - South (7)							
POINT	TRU_34	314521.00	3923972.00	174.55	3.96	0.16670	501.00	49.00	0.04
		Bldg 4 Docks - South (7)							
POINT	TRU_35	314557.66	3923972.11	174.99	3.96	0.16670	501.00	49.00	0.04
		Bldg 4 Docks - South (7)							
POINT	TRU_36	314589.50	3923970.88	175.34	3.96	0.16670	501.00	49.00	0.04
		Bldg 4 Docks - South (7)							
POINT	TRU_37	314624.36	3923970.15	175.71	3.96	0.16670	501.00	49.00	0.04
		Bldg 4 Docks - South (7)							
POINT	TRU_38	314653.83	3923970.66	176.06	3.96	0.16670	501.00	49.00	0.04
		Bldg 4 Docks - South East (5)							
POINT	EGEN1	314919.78	3924463.97	186.74	3.00	1.00000	789.00	57.40	0.13
		Emergency Generator - Building 1 (300 hp)							
POINT	EGEN2	314915.97	3924335.52	184.72	3.00	1.00000	789.00	57.40	0.13
		Emergency Generator - Building 2 (300 hp)							
POINT	EGEN3	314782.68	3924129.72	179.94	3.00	1.00000	789.00	57.40	0.13
		Emergency Generator - Building 3 (300 Hp)							

Source Pathway - Source Inputs

AERMOD

Source Type	Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation (Optional)	Release Height [m]	Emission Rate [g/s]	Gas Exit Temp. [K]	Gas Exit Velocity [m/s]	Stack Inside Diameter [m]
POINT	EGEN4_1	314692.20	3923955.41	176.22	3.00	1.00000	789.00	57.40	0.13
		Emergency Generator - Building 4 N (300 hp)							
POINT	EGEN4_2	314687.53	3924185.67	179.71	3.00	1.00000	789.00	57.40	0.13
		Emergency Generator - Building 4 S (300 hp)							
POINT	EGEN4_3	314699.93	3923955.68	176.30	3.00	1.00000	750.00	52.20	0.25
		Emergency Generator - Building 4S - Cold Storage (1475 hp)							

Source Pathway - Source Inputs

Line Volume Sources

Source Type: LINE VOLUME

Source: OFFSITE1 (Airport Drive to Merle Haggard Blvd - OffSite Running)

Length of Side [m]	Emission Rate [g/ s]	Building Height [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
26.00	1.00000	Surface-Based	313348.42	3923982.85	157.37	3.89
			313458.41	3923942.04	157.82	3.89
			313532.92	3923926.08	158.69	3.89
			313655.33	3923922.53	160.91	3.89
			313807.90	3923920.75	163.17	3.89
			314049.17	3923903.01	166.59	3.89
			314130.78	3923897.69	167.57	3.89
			314395.11	3923887.05	171.51	3.89
			314907.22	3923871.32	178.01	3.89
			314944.99	3923868.67	178.48	3.89
			314967.71	3924310.30	185.14	3.89

Source Type: LINE VOLUME

Source: OFFSITE2 (Airport to Petrol to Landing Alternate Route - Offsite Running)

Length of Side [m]	Emission Rate [g/ s]	Building Height [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
26.00	1.00000	Surface-Based	314966.80	3924319.63	185.25	3.89
			314980.78	3924690.63	191.27	3.89
			314221.54	3924715.89	178.03	3.89
			314173.41	3924717.10	176.69	3.89
			314169.21	3924317.76	173.14	3.89
			314157.51	3923897.43	167.91	3.89

Source Pathway - Source Inputs

AERMOD

Volume Sources Generated from Line Sources

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
OFFSITE1	L0000236	313360.60	3923978.32	157.40	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000237	313384.98	3923969.28	157.50	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000238	313409.36	3923960.24	157.60	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000239	313433.73	3923951.19	157.71	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000240	313458.11	3923942.15	157.84	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000241	313483.52	3923936.66	158.05	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000242	313508.94	3923931.21	158.30	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000243	313534.40	3923926.03	158.72	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000244	313560.39	3923925.28	159.14	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000245	313586.38	3923924.53	159.62	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000246	313612.37	3923923.77	160.13	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000247	313638.36	3923923.02	160.55	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000248	313664.35	3923922.42	161.02	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000249	313690.35	3923922.12	161.48	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000250	313716.34	3923921.82	161.88	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000251	313742.34	3923921.52	162.27	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000252	313768.34	3923921.21	162.64	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000253	313794.34	3923920.91	163.01	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000254	313820.31	3923919.84	163.40	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000255	313846.24	3923917.93	163.85	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000256	313872.17	3923916.03	164.19	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000257	313898.10	3923914.12	164.55	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000258	313924.03	3923912.21	164.91	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000259	313949.96	3923910.31	165.29	3.89	0.01266	26.00	Surface-Based	12.09	3.62

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
OFFSITE1	L0000260	313975.89	3923908.40	165.64	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000261	314001.82	3923906.49	166.00	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000262	314027.75	3923904.59	166.31	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000263	314053.68	3923902.72	166.64	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000264	314079.62	3923901.03	166.94	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000265	314105.57	3923899.33	167.28	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000266	314131.51	3923897.66	167.61	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000267	314157.49	3923896.61	167.97	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000268	314183.47	3923895.57	168.34	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000269	314209.45	3923894.52	168.73	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000270	314235.43	3923893.48	169.14	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000271	314261.41	3923892.43	169.55	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000272	314287.39	3923891.38	169.94	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000273	314313.37	3923890.34	170.32	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000274	314339.34	3923889.29	170.70	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000275	314365.32	3923888.25	171.08	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000276	314391.30	3923887.20	171.44	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000277	314417.29	3923886.36	171.74	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000278	314443.28	3923885.57	172.02	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000279	314469.26	3923884.77	172.34	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000280	314495.25	3923883.97	172.65	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000281	314521.24	3923883.17	172.97	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000282	314547.23	3923882.37	173.29	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000283	314573.22	3923881.58	173.61	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000284	314599.20	3923880.78	173.92	3.89	0.01266	26.00	Surface-Based	12.09	3.62

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
OFFSITE1	L0000285	314625.19	3923879.98	174.22	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000286	314651.18	3923879.18	174.54	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000287	314677.17	3923878.38	174.87	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000288	314703.15	3923877.58	175.19	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000289	314729.14	3923876.79	175.49	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000290	314755.13	3923875.99	175.81	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000291	314781.12	3923875.19	176.15	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000292	314807.11	3923874.39	176.53	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000293	314833.09	3923873.59	176.91	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000294	314859.08	3923872.79	177.31	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000295	314885.07	3923872.00	177.73	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000296	314911.05	3923871.05	178.10	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000297	314936.99	3923869.23	178.48	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000298	314945.92	3923886.62	178.80	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000299	314947.25	3923912.59	179.19	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000300	314948.59	3923938.55	179.57	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000301	314949.92	3923964.52	179.94	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000302	314951.26	3923990.49	180.25	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000303	314952.60	3924016.45	180.58	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000304	314953.93	3924042.42	180.99	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000305	314955.27	3924068.38	181.38	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000306	314956.60	3924094.35	181.84	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000307	314957.94	3924120.31	182.18	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000308	314959.28	3924146.28	182.50	3.89	0.01266	26.00	Surface-Based	12.09	3.62
						0.01266				

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
OFFSITE1	L0000310	314961.95	3924198.21	183.34	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000311	314963.28	3924224.18	183.75	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000312	314964.62	3924250.14	184.16	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000313	314965.96	3924276.11	184.55	3.89	0.01266	26.00	Surface-Based	12.09	3.62
	L0000314	314967.29	3924302.07	185.05	3.89	0.01266	26.00	Surface-Based	12.09	3.62

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
OFFSITE2	L0000315	314967.29	3924332.62	185.53	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000316	314968.27	3924358.61	185.93	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000317	314969.25	3924384.59	186.31	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000318	314970.23	3924410.57	186.67	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000319	314971.21	3924436.55	187.06	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000320	314972.18	3924462.53	187.42	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000321	314973.16	3924488.51	187.74	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000322	314974.14	3924514.50	188.10	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000323	314975.12	3924540.48	188.48	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000324	314976.10	3924566.46	188.85	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000325	314977.08	3924592.44	189.29	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000326	314978.06	3924618.42	189.69	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000327	314979.04	3924644.40	190.14	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000328	314980.01	3924670.38	190.67	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000329	314975.04	3924690.82	191.03	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000330	314949.05	3924691.68	190.35	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000331	314923.06	3924692.55	189.72	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000332	314897.08	3924693.41	189.26	3.89	0.01299	26.00	Surface-Based	12.09	3.62

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
OFFSITE2	L0000333	314871.09	3924694.28	188.96	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000334	314845.11	3924695.14	188.53	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000335	314819.12	3924696.01	188.04	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000336	314793.14	3924696.87	187.56	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000337	314767.15	3924697.74	187.06	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000338	314741.17	3924698.60	186.48	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000339	314715.18	3924699.47	186.00	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000340	314689.19	3924700.33	185.59	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000341	314663.21	3924701.20	185.16	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000342	314637.22	3924702.06	184.81	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000343	314611.24	3924702.92	184.54	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000344	314585.25	3924703.79	184.47	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000345	314559.27	3924704.65	184.31	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000346	314533.28	3924705.52	184.02	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000347	314507.29	3924706.38	183.59	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000348	314481.31	3924707.25	183.07	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000349	314455.32	3924708.11	182.48	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000350	314429.34	3924708.98	182.05	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000351	314403.35	3924709.84	181.60	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000352	314377.37	3924710.71	181.01	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000353	314351.38	3924711.57	180.39	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000354	314325.40	3924712.44	179.78	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000355	314299.41	3924713.30	179.39	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000356	314273.42	3924714.17	179.05	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000357	314247.44	3924715.03	178.61	3.89	0.01299	26.00	Surface-Based	12.09	3.62

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
OFFSITE2	L0000358	314221.45	3924715.90	177.97	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000359	314195.46	3924716.55	177.24	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000360	314173.36	3924713.16	176.64	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000361	314173.09	3924687.16	176.33	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000362	314172.82	3924661.16	175.95	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000363	314172.55	3924635.16	175.58	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000364	314172.27	3924609.17	175.34	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000365	314172.00	3924583.17	175.22	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000366	314171.73	3924557.17	175.10	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000367	314171.45	3924531.17	174.98	3.89	0.01299	26.00	Surface-Based	12.09	3.62
						0.01299				
	L0000369	314170.91	3924479.17	174.55	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000370	314170.63	3924453.17	174.33	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000371	314170.36	3924427.18	174.15	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000372	314170.09	3924401.18	174.05	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000373	314169.81	3924375.18	173.89	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000374	314169.54	3924349.18	173.59	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000375	314169.27	3924323.18	173.31	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000376	314168.64	3924297.19	172.90	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000377	314167.91	3924271.20	172.50	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000378	314167.19	3924245.21	172.29	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000379	314166.47	3924219.22	172.03	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000380	314165.74	3924193.23	171.66	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000381	314165.02	3924167.24	171.41	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000382	314164.30	3924141.25	171.06	3.89	0.01299	26.00	Surface-Based	12.09	3.62

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
OFFSITE2	L0000383	314163.57	3924115.26	170.74	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000384	314162.85	3924089.27	170.44	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000385	314162.13	3924063.28	170.13	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000386	314161.40	3924037.29	169.74	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000387	314160.68	3924011.30	169.35	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000388	314159.95	3923985.31	168.80	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000389	314159.23	3923959.32	168.34	3.89	0.01299	26.00	Surface-Based	12.09	3.62
	L0000390	314158.51	3923933.33	168.09	3.89		26.00		12.09	3.62
	L0000391	314157.78	3923907.34	168.02	3.89	0.01299	26.00	Surface-Based	12.09	3.62

Source Pathway

AERMOD

Source ID: IDLEX_01

Heights [m] (10 to 360 deg)

10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19

Widths [m] (10 to 360 deg)

10-60 deg	259.80	268.48	269.00	261.36	245.77	222.71
70-120 deg	192.89	157.20	116.74	145.63	182.60	214.01
130-180 deg	238.93	256.58	266.44	268.21	261.82	247.48
190-240 deg	259.80	268.48	269.00	261.36	245.77	222.71
250-300 deg	192.89	157.20	116.74	145.63	182.60	214.01
310-360 deg	238.93	256.58	266.44	268.21	261.82	247.48

Lengths [m] (10 to 360 deg)

10-60 deg	145.63	182.60	214.01	238.93	256.58	266.44
70-120 deg	268.21	261.82	247.48	259.80	268.48	269.00
130-180 deg	261.36	245.77	222.71	192.89	157.20	116.74
190-240 deg	145.63	182.60	214.01	238.93	256.58	266.44
250-300 deg	268.21	261.82	247.48	259.80	268.48	269.00
310-360 deg	261.36	245.77	222.71	192.89	157.20	116.74

Along Flow [m] (10 to 360 deg)

10-60 deg	-15.76	-21.38	-26.34	-30.51	-33.75	-35.96
70-120 deg	-37.08	-37.07	-35.94	-50.23	-65.73	-79.24
130-180 deg	-90.33	-98.69	-104.04	-106.24	-105.20	-100.97
190-240 deg	-129.87	-161.22	-187.67	-208.42	-222.84	-230.48
250-300 deg	-231.13	-224.75	-211.54	-209.57	-202.75	-189.77
310-360 deg	-171.02	-147.08	-118.67	-86.65	-52.00	-15.77

Across Flow [m] (10 to 360 deg)

10-60 deg	-79.67	-68.51	-55.27	-40.34	-24.20	-7.31
70-120 deg	9.79	26.60	42.60	57.05	69.92	80.66
130-180 deg	88.96	94.55	97.26	97.02	93.84	87.80
190-240 deg	79.67	68.51	55.27	40.34	24.20	7.31
250-300 deg	-9.79	-26.60	-42.60	-57.05	-69.92	-80.66
310-360 deg	-88.96	-94.55	-97.26	-97.02	-93.84	-87.80

Source ID: IDLEX_02

70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	259.80	268.48	269.00	261.36	245.77	222.71
70-120 deg	192.89	157.20	116.74	145.63	182.60	214.01
130-180 deg	238.93	256.58	266.44	268.21	261.82	247.48
190-240 deg	259.80	268.48	269.00	261.36	245.77	222.71
250-300 deg	192.89	157.20	116.74	145.63	182.60	214.01
310-360 deg	238.93	256.58	266.44	268.21	261.82	247.48
Lengths [m] (10 to 360 deg)						
10-60 deg	145.63	182.60	214.01	238.93	256.58	266.44
70-120 deg	268.21	261.82	247.48	259.80	268.48	269.00
130-180 deg	261.36	245.77	222.71	192.89	157.20	116.74
190-240 deg	145.63	182.60	214.01	238.93	256.58	266.44
250-300 deg	268.21	261.82	247.48	259.80	268.48	269.00
310-360 deg	261.36	245.77	222.71	192.89	157.20	116.74
Along Flow [m] (10 to 360 deg)						
10-60 deg	-20.26	-30.63	-40.07	-48.30	-55.05	-60.14
70-120 deg	-63.40	-64.73	-64.09	-78.02	-92.32	-103.82
130-180 deg	-112.16	-117.09	-118.46	-116.24	-110.48	-101.37
190-240 deg	-125.37	-151.97	-173.94	-190.63	-201.53	-206.31
250-300 deg	-204.81	-197.10	-183.39	-181.78	-176.16	-165.19
310-360 deg	-149.20	-128.68	-104.25	-76.65	-46.72	-15.37
Across Flow [m] (10 to 360 deg)						
10-60 deg	-51.88	-41.92	-30.69	-18.52	-5.79	7.11
70-120 deg	19.80	31.88	43.00	52.56	60.67	66.93
130-180 deg	71.17	73.24	73.08	70.71	66.18	59.65
190-240 deg	51.88	41.92	30.69	18.52	5.79	-7.11
250-300 deg	-19.80	-31.88	-43.00	-52.56	-60.67	-66.93
310-360 deg	-71.17	-73.24	-73.08	-70.71	-66.18	-59.65

Source ID: IDLEX_03

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19

Source Pathway

Widths [m] (10 to 360 deg)						
10-60 deg	259.80	268.48	269.00	261.36	245.77	222.71
70-120 deg	192.89	157.20	116.74	145.63	182.60	214.01
130-180 deg	238.93	256.58	266.44	268.21	261.82	247.48
190-240 deg	259.80	268.48	269.00	261.36	245.77	222.71
250-300 deg	192.89	157.20	116.74	145.63	182.60	214.01
310-360 deg	238.93	256.58	266.44	268.21	261.82	247.48
Lengths [m] (10 to 360 deg)						
10-60 deg	145.63	182.60	214.01	238.93	256.58	266.44
70-120 deg	268.21	261.82	247.48	259.80	268.48	269.00
130-180 deg	261.36	245.77	222.71	192.89	157.20	116.74
190-240 deg	145.63	182.60	214.01	238.93	256.58	266.44
250-300 deg	268.21	261.82	247.48	259.80	268.48	269.00
310-360 deg	261.36	245.77	222.71	192.89	157.20	116.74
Along Flow [m] (10 to 360 deg)						
10-60 deg	-25.79	-42.42	-57.76	-71.35	-82.77	-91.68
70-120 deg	-97.80	-100.95	-101.03	-114.56	-127.34	-136.26
130-180 deg	-141.03	-141.52	-137.71	-129.72	-117.78	-102.27
190-240 deg	-119.84	-140.18	-156.25	-167.58	-173.81	-174.76
250-300 deg	-170.41	-160.87	-146.45	-145.24	-141.14	-132.75
310-360 deg	-120.32	-104.24	-85.00	-63.17	-39.42	-14.47
Across Flow [m] (10 to 360 deg)						
10-60 deg	-15.34	-6.90	1.75	10.35	18.64	26.36
70-120 deg	33.28	39.18	43.90	47.03	48.88	49.24
130-180 deg	48.11	45.52	41.54	36.30	29.96	22.71
190-240 deg	15.34	6.90	-1.75	-10.35	-18.64	-26.36
250-300 deg	-33.28	-39.18	-43.90	-47.03	-48.88	-49.24
310-360 deg	-48.11	-45.52	-41.54	-36.30	-29.96	-22.71

Source ID: IDLEX_04

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	259.80	268.48	269.00	261.36	245.77	222.71
70-120 deg	192.89	157.20	116.74	145.63	182.60	214.01
130-180 deg	238.93	256.58	266.44	268.21	261.82	247.48
190-240 deg	259.80	268.48	269.00	261.36	245.77	222.71

250-300 deg	192.89	157.20	116.74	145.63	182.60	214.01
310-360 deg	238.93	256.58	266.44	268.21	261.82	247.48
Lengths [m] (10 to 360 deg)						
10-60 deg	145.63	182.60	214.01	238.93	256.58	266.44
70-120 deg	268.21	261.82	247.48	259.80	268.48	269.00
130-180 deg	261.36	245.77	222.71	192.89	157.20	116.74
190-240 deg	145.63	182.60	214.01	238.93	256.58	266.44
250-300 deg	268.21	261.82	247.48	259.80	268.48	269.00
310-360 deg	261.36	245.77	222.71	192.89	157.20	116.74
Along Flow [m] (10 to 360 deg)						
10-60 deg	-31.36	-54.23	-75.46	-94.39	-110.45	-123.16
70-120 deg	-132.13	-137.08	-137.87	-150.98	-162.25	-168.58
130-180 deg	-169.79	-165.85	-156.86	-143.11	-125.01	-103.11
190-240 deg	-114.27	-128.37	-138.56	-144.54	-146.13	-143.28
250-300 deg	-136.08	-124.74	-109.61	-108.81	-106.23	-100.42
310-360 deg	-91.56	-79.92	-65.85	-49.78	-32.19	-13.63
Across Flow [m] (10 to 360 deg)						
10-60 deg	21.08	28.01	34.08	39.12	42.96	45.51
70-120 deg	46.67	46.41	44.74	41.46	37.07	31.55
130-180 deg	25.08	17.84	10.06	1.97	-6.17	-14.13
190-240 deg	-21.08	-28.01	-34.08	-39.12	-42.96	-45.51
250-300 deg	-46.67	-46.41	-44.74	-41.46	-37.07	-31.55
310-360 deg	-25.08	-17.84	-10.06	-1.97	6.17	14.13

Source ID: IDLEX_05

Source Pathway

130-180 deg	261.36	245.77	222.71	192.89	157.20	116.74
190-240 deg	145.63	182.60	214.01	238.93	256.58	266.44
250-300 deg	268.21	261.82	247.48	259.80	268.48	269.00
310-360 deg	261.36	245.77	222.71	192.89	157.20	116.74
Along Flow [m] (10 to 360 deg)						
10-60 deg	-37.27	-66.46	-93.64	-117.96	-138.71	-155.24
70-120 deg	-167.05	-173.79	-175.25	-187.90	-197.57	-201.25
130-180 deg	-198.81	-190.33	-176.06	-156.45	-132.08	-103.70
190-240 deg	-108.36	-116.14	-120.38	-120.96	-117.87	-111.20
250-300 deg	-101.15	-88.03	-72.23	-71.90	-70.91	-67.76
310-360 deg	-62.55	-55.44	-46.65	-36.44	-25.12	-13.04
Across Flow [m] (10 to 360 deg)						
10-60 deg	58.00	63.33	66.75	68.13	67.44	64.71
70-120 deg	60.01	53.48	45.33	35.55	24.84	13.37
130-180 deg	1.50	-10.42	-22.02	-32.95	-42.88	-51.51
190-240 deg	-58.00	-63.33	-66.75	-68.13	-67.44	-64.71
250-300 deg	-60.01	-53.48	-45.33	-35.55	-24.84	-13.37
310-360 deg	-1.50	10.42	22.02	32.95	42.88	51.51

Source ID: IDLEX_06

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	259.80	268.48	269.00	261.36	245.77	222.71
70-120 deg	192.89	157.20	116.74	145.63	182.60	214.01
130-180 deg	238.93	256.58	266.44	268.21	261.82	247.48
190-240 deg	259.80	268.48	269.00	261.36	245.77	222.71
250-300 deg	192.89	157.20	116.74	145.63	182.60	214.01
310-360 deg	238.93	256.58	266.44	268.21	261.82	247.48
Lengths [m] (10 to 360 deg)						
10-60 deg	145.63	182.60	214.01	238.93	256.58	266.44
70-120 deg	268.21	261.82	247.48	259.80	268.48	269.00
130-180 deg	261.36	245.77	222.71	192.89	157.20	116.74
190-240 deg	145.63	182.60	214.01	238.93	256.58	266.44
250-300 deg	268.21	261.82	247.48	259.80	268.48	269.00
310-360 deg	261.36	245.77	222.71	192.89	157.20	116.74

Source Pathway

AERMOD

Along Flow [m] (10 to 360 deg)						
10-60 deg	-42.75	-78.18	-111.24	-140.93	-166.33	-186.67
70-120 deg	-201.35	-209.90	-212.08	-224.33	-232.50	-233.61
130-180 deg	-227.62	-214.71	-195.28	-169.92	-139.39	-104.63
190-240 deg	-102.88	-104.41	-102.77	-98.00	-90.26	-79.77
250-300 deg	-66.86	-51.92	-35.40	-35.47	-35.98	-35.40
310-360 deg	-33.74	-31.05	-27.43	-22.97	-17.81	-12.11
Across Flow [m] (10 to 360 deg)						
10-60 deg	94.43	98.26	99.11	96.94	91.83	83.93
70-120 deg	73.48	60.79	46.26	30.07	13.12	-4.24
130-180 deg	-21.46	-38.03	-53.45	-67.24	-78.99	-88.34
190-240 deg	-94.43	-98.26	-99.11	-96.94	-91.83	-83.93
250-300 deg	-73.48	-60.79	-46.26	-30.07	-13.12	4.24
310-360 deg	21.46	38.03	53.45	67.24	78.99	88.34

Source ID: IDLEX_07

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	256.08	260.85	257.69	246.70	228.22	202.80
70-120 deg	171.22	134.44	93.57	122.56	160.64	193.84
130-180 deg	221.14	241.73	254.97	260.47	258.05	247.79
190-240 deg	256.08	260.85	257.69	246.70	228.22	202.80
250-300 deg	171.22	134.44	93.57	122.56	160.64	193.84
310-360 deg	221.14	241.73	254.97	260.47	258.05	247.79
Lengths [m] (10 to 360 deg)						
10-60 deg	122.56	160.64	193.84	221.14	241.73	254.97
70-120 deg	260.47	258.05	247.79	256.08	260.85	257.69
130-180 deg	246.70	228.22	202.80	171.22	134.44	93.57
190-240 deg	122.56	160.64	193.84	221.14	241.73	254.97
250-300 deg	260.47	258.05	247.79	256.08	260.85	257.69
310-360 deg	246.70	228.22	202.80	171.22	134.44	93.57
Along Flow [m] (10 to 360 deg)						
10-60 deg	-14.98	-20.90	-26.19	-30.68	-34.24	-36.76
70-120 deg	-38.16	-38.40	-37.48	-47.55	-59.23	-69.10
130-180 deg	-76.88	-82.32	-85.26	-85.61	-83.36	-78.57
190-240 deg	-107.58	-139.74	-167.65	-190.46	-207.49	-218.21

250-300 deg	-222.31	-219.65	-210.31	-208.53	-201.62	-188.59
310-360 deg	-169.82	-145.90	-117.54	-85.61	-51.08	-15.00
Across Flow [m] (10 to 360 deg)						
10-60 deg	-80.49	-71.20	-59.74	-46.47	-31.79	-16.14
70-120 deg	0.00	16.14	31.79	46.30	59.42	70.73
130-180 deg	79.89	86.63	90.73	92.07	90.62	86.42
190-240 deg	80.49	71.20	59.74	46.47	31.79	16.14
250-300 deg	0.00	-16.14	-31.79	-46.30	-59.42	-70.73
310-360 deg	-79.89	-86.63	-90.73	-92.07	-90.62	-86.41

Source ID: IDLEX_08

130-180 deg	61.88	65.05	66.24	65.42	62.62	57.90
190-240 deg	52.34	44.27	34.85	24.37	13.15	1.53
250-300 deg	-10.13	-21.49	-32.20	-41.76	-50.05	-56.83
310-360 deg	-61.88	-65.05	-66.24	-65.42	-62.62	-57.90

Source ID: IDLEX_09

Heights [m] (10 to 360 deg)

10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19

Widths [m] (10 to 360 deg)

10-60 deg	256.08	260.85	257.69	246.70	228.22	202.80
70-120 deg	171.22	134.44	93.57	122.56	160.64	193.84
130-180 deg	221.14	241.73	254.97	260.47	258.05	247.79
190-240 deg	256.08	260.85	257.69	246.70	228.22	202.80
250-300 deg	171.22	134.44	93.57	122.56	160.64	193.84
310-360 deg	221.14	241.73	254.97	260.47	258.05	247.79

Lengths [m] (10 to 360 deg)

10-60 deg	122.56	160.64	193.84	221.14	241.73	254.97
70-120 deg	260.47	258.05	247.79	256.08	260.85	257.69
130-180 deg	246.70	228.22	202.80	171.22	134.44	93.57
190-240 deg	122.56	160.64	193.84	221.14	241.73	254.97
250-300 deg	260.47	258.05	247.79	256.08	260.85	257.69
310-360 deg	246.70	228.22	202.80	171.22	134.44	93.57

Along Flow [m] (10 to 360 deg)

10-60 deg	-25.64	-42.55	-58.18	-72.03	-83.70	-92.82
70-120 deg	-99.13	-102.42	-102.60	-111.80	-120.64	-125.83
130-180 deg	-127.19	-124.68	-118.39	-108.50	-95.31	-79.23
190-240 deg	-96.93	-118.09	-135.66	-149.11	-158.03	-162.15
250-300 deg	-161.34	-155.63	-145.19	-144.28	-140.20	-131.86
310-360 deg	-119.51	-103.53	-84.41	-62.72	-39.12	-14.34

Across Flow [m] (10 to 360 deg)

10-60 deg	-16.24	-9.78	-3.02	3.84	10.57	16.99
70-120 deg	22.89	28.09	32.44	35.65	37.77	38.74
130-180 deg	38.54	37.16	34.66	31.11	26.60	21.29
190-240 deg	16.24	9.78	3.02	-3.84	-10.57	-16.99
250-300 deg	-22.89	-28.09	-32.45	-35.65	-37.77	-38.74
310-360 deg	-38.54	-37.16	-34.66	-31.11	-26.60	-21.29

Source Pathway

Source ID: IDLEX_10

Heights [m] (10 to 360 deg)

10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19

Widths [m] (10 to 360 deg)

10-60 deg	256.08	260.85	257.69	246.70	228.22	202.80
70-120 deg	171.22	134.44	93.57	122.56	160.64	193.84
130-180 deg	221.14	241.73	254.97	260.47	258.05	247.79
190-240 deg	256.08	260.85	257.69	246.70	228.22	202.80
250-300 deg	171.22	134.44	93.57	122.56	160.64	193.84
310-360 deg	221.14	241.73	254.97	260.47	258.05	247.79

Lengths [m] (10 to 360 deg)

10-60 deg	122.56	160.64	193.84	221.14	241.73	254.97
70-120 deg	260.47	258.05	247.79	256.08	260.85	257.69
130-180 deg	246.70	228.22	202.80	171.22	134.44	93.57
190-240 deg	122.56	160.64	193.84	221.14	241.73	254.97
250-300 deg	260.47	258.05	247.79	256.08	260.85	257.69
310-360 deg	246.70	228.22	202.80	171.22	134.44	93.57

Along Flow [m] (10 to 360 deg)

10-60 deg	-30.65	-53.96	-75.63	-95.00	-111.49	-124.59
70-120 deg	-133.90	-139.14	-140.16	-149.05	-156.46	-159.12
130-180 deg	-156.94	-150.00	-138.50	-122.78	-103.34	-80.76
190-240 deg	-91.91	-106.68	-118.20	-126.14	-130.24	-130.39
250-300 deg	-126.57	-118.91	-107.63	-107.03	-104.38	-98.57
310-360 deg	-89.76	-78.22	-64.30	-48.44	-31.09	-12.81

Across Flow [m] (10 to 360 deg)

10-60 deg	21.01	26.04	30.28	33.59	35.89	37.10
70-120 deg	37.17	36.12	33.97	30.63	26.36	21.29
130-180 deg	15.57	9.38	2.90	-3.67	-10.12	-16.26
190-240 deg	-21.01	-26.04	-30.28	-33.59	-35.89	-37.10
250-300 deg	-37.17	-36.12	-33.97	-30.63	-26.36	-21.29
310-360 deg	-15.57	-9.38	-2.90	3.67	10.12	16.26

Source ID: IDLEX_11

Source Pathway

190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	256.08	260.85	257.69	246.70	228.22	202.80
70-120 deg	171.22	134.44	93.57	122.56	160.64	193.84
130-180 deg	221.14	241.73	254.97	260.47	258.05	247.79
190-240 deg	256.08	260.85	257.69	246.70	228.22	202.80
250-300 deg	171.22	134.44	93.57	122.56	160.64	193.84
310-360 deg	221.14	241.73	254.97	260.47	258.05	247.79
Lengths [m] (10 to 360 deg)						
10-60 deg	122.56	160.64	193.84	221.14	241.73	254.97
70-120 deg	260.47	258.05	247.79	256.08	260.85	257.69
130-180 deg	246.70	228.22	202.80	171.22	134.44	93.57
190-240 deg	122.56	160.64	193.84	221.14	241.73	254.97
250-300 deg	260.47	258.05	247.79	256.08	260.85	257.69
310-360 deg	246.70	228.22	202.80	171.22	134.44	93.57
Along Flow [m] (10 to 360 deg)						
10-60 deg	-36.79	-66.25	-93.70	-118.30	-139.31	-156.08
70-120 deg	-168.11	-175.03	-176.64	-185.01	-190.81	-190.81
130-180 deg	-185.02	-173.60	-156.91	-135.45	-109.87	-80.96
190-240 deg	-85.77	-94.39	-100.14	-102.84	-102.42	-98.89
250-300 deg	-92.36	-83.01	-71.15	-71.07	-70.03	-66.87
310-360 deg	-61.68	-54.62	-45.89	-35.77	-24.56	-12.61
Across Flow [m] (10 to 360 deg)						
10-60 deg	56.97	60.39	61.97	61.67	59.49	55.51
70-120 deg	49.84	42.66	34.17	24.49	14.07	3.22
130-180 deg	-7.73	-18.44	-28.59	-37.88	-46.01	-52.75
190-240 deg	-56.97	-60.39	-61.97	-61.67	-59.49	-55.51
250-300 deg	-49.84	-42.66	-34.17	-24.49	-14.07	-3.22
310-360 deg	7.73	18.44	28.59	37.88	46.01	52.75

Source ID: IDLEX_12

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	256.08	260.85	257.69	246.70	228.22	202.80

Source Pathway

AERMOD

70-120 deg	171.22	134.44	93.57	122.56	160.64	193.84
130-180 deg	221.14	241.73	254.97	260.47	258.05	247.79
190-240 deg	256.08	260.85	257.69	246.70	228.22	202.80
250-300 deg	171.22	134.44	93.57	122.56	160.64	193.84
310-360 deg	221.14	241.73	254.97	260.47	258.05	247.79
Lengths [m] (10 to 360 deg)						
10-60 deg	122.56	160.64	193.84	221.14	241.73	254.97
70-120 deg	260.47	258.05	247.79	256.08	260.85	257.69
130-180 deg	246.70	228.22	202.80	171.22	134.44	93.57
190-240 deg	122.56	160.64	193.84	221.14	241.73	254.97
250-300 deg	260.47	258.05	247.79	256.08	260.85	257.69
310-360 deg	246.70	228.22	202.80	171.22	134.44	93.57
Along Flow [m] (10 to 360 deg)						
10-60 deg	-42.50	-78.26	-111.63	-141.62	-167.31	-187.91
70-120 deg	-202.80	-211.53	-213.83	-221.77	-226.02	-223.40
130-180 deg	-214.00	-198.09	-176.16	-148.88	-117.08	-81.72
190-240 deg	-80.06	-82.38	-82.20	-79.52	-74.42	-67.07
250-300 deg	-57.67	-46.52	-33.96	-34.31	-34.83	-34.29
310-360 deg	-32.71	-30.13	-26.64	-22.34	-17.36	-11.85
Across Flow [m] (10 to 360 deg)						
10-60 deg	93.73	95.60	94.56	90.65	83.98	74.76
70-120 deg	63.27	49.86	34.93	18.78	2.06	-14.72
130-180 deg	-31.05	-46.44	-60.42	-72.56	-82.50	-89.94
190-240 deg	-93.73	-95.60	-94.56	-90.65	-83.98	-74.76
250-300 deg	-63.27	-49.86	-34.93	-18.78	-2.06	14.72
310-360 deg	31.05	46.44	60.42	72.56	82.50	89.94

Source ID: IDLEX_13

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	134.64	157.60	175.78	188.61	195.71	196.86
70-120 deg	192.04	181.37	165.20	178.33	190.32	196.52
130-180 deg	196.75	191.00	179.45	162.45	140.51	114.30
190-240 deg	134.64	157.60	175.78	188.61	195.71	196.86
250-300 deg	192.04	181.37	165.20	178.33	190.32	196.52
310-360 deg	196.75	191.00	179.45	162.45	140.51	114.30

Source Pathway

Lengths [m] (10 to 360 deg)						
10-60 deg	178.33	190.32	196.52	196.75	191.00	179.45
70-120 deg	162.45	140.51	114.30	134.64	157.60	175.78
130-180 deg	188.61	195.71	196.86	192.04	181.37	165.20
190-240 deg	178.33	190.32	196.52	196.75	191.00	179.45
250-300 deg	162.45	140.51	114.30	134.64	157.60	175.78
310-360 deg	188.61	195.71	196.86	192.04	181.37	165.20
Along Flow [m] (10 to 360 deg)						
10-60 deg	-110.79	-108.34	-102.60	-93.74	-82.03	-67.83
70-120 deg	-51.57	-33.74	-14.89	-19.90	-28.26	-35.76
130-180 deg	-42.18	-47.31	-51.01	-53.16	-53.69	-52.59
190-240 deg	-67.55	-81.98	-93.92	-103.01	-108.97	-111.62
250-300 deg	-110.88	-106.77	-99.41	-114.75	-129.35	-140.02
310-360 deg	-146.43	-148.40	-145.85	-138.88	-127.68	-112.61
Across Flow [m] (10 to 360 deg)						
10-60 deg	-47.42	-50.54	-52.13	-52.13	-50.54	-47.42
70-120 deg	-42.86	-37.00	-30.01	-21.62	-13.18	-4.34
130-180 deg	4.64	13.47	21.90	29.65	36.51	42.26
190-240 deg	47.42	50.54	52.13	52.13	50.54	47.42
250-300 deg	42.86	37.00	30.01	21.62	13.18	4.34
310-360 deg	-4.64	-13.47	-21.90	-29.65	-36.51	-42.26

Source ID: IDLEX_14

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	134.64	157.60	175.78	188.61	195.71	196.86
70-120 deg	192.04	181.37	165.20	178.33	190.32	196.52
130-180 deg	196.75	191.00	179.45	162.45	140.51	114.30
190-240 deg	134.64	157.60	175.78	188.61	195.71	196.86
250-300 deg	192.04	181.37	165.20	178.33	190.32	196.52
310-360 deg	196.75	191.00	179.45	162.45	140.51	114.30
Lengths [m] (10 to 360 deg)						
10-60 deg	178.33	190.32	196.52	196.75	191.00	179.45
70-120 deg	162.45	140.51	114.30	134.64	157.60	175.78
130-180 deg	188.61	195.71	196.86	192.04	181.37	165.20
190-240 deg	178.33	190.32	196.52	196.75	191.00	179.45

250-300 deg	162.45	140.51	114.30	134.64	157.60	175.78
310-360 deg	188.61	195.71	196.86	192.04	181.37	165.20
Along Flow [m] (10 to 360 deg)						
10-60 deg	-87.04	-85.51	-81.38	-74.77	-65.90	-55.02
70-120 deg	-42.47	-28.63	-13.92	-23.10	-35.53	-46.89
130-180 deg	-56.82	-65.03	-71.26	-75.32	-77.10	-76.53
190-240 deg	-91.29	-104.81	-115.14	-121.98	-125.10	-124.43
250-300 deg	-119.98	-111.88	-100.38	-111.54	-122.07	-128.89
310-360 deg	-131.78	-130.68	-125.61	-116.71	-104.28	-88.67
Across Flow [m] (10 to 360 deg)						
10-60 deg	-44.22	-43.27	-41.00	-37.48	-32.83	-27.17
70-120 deg	-20.70	-13.59	-6.07	2.12	9.65	16.88
130-180 deg	23.60	29.60	34.71	38.75	41.62	43.23
190-240 deg	44.22	43.27	41.00	37.48	32.83	27.17
250-300 deg	20.70	13.59	6.07	-2.12	-9.65	-16.88
310-360 deg	-23.60	-29.60	-34.71	-38.75	-41.62	-43.23

IDLEX_15						
Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	134.64	157.60	175.78	188.61	195.71	196.86
70-120 deg	192.04	181.37	165.20	178.33	190.32	196.52
130-180 deg	196.75	191.00	179.45	162.45	140.51	114.30
190-240 deg	134.64	157.60	175.78	188.61	195.71	196.86
250-300 deg	192.04	181.37	165.20	178.33	190.32	196.52
310-360 deg	196.75	191.00	179.45	162.45	140.51	114.30
Lengths [m] (10 to 360 deg)						
10-60 deg	178.33	190.32	196.52	196.75	191.00	179.45
70-120 deg	162.45	140.51	114.30	134.64	157.60	175.78
130-180 deg	188.61	195.71	196.86	192.04	181.37	165.20
190-240 deg	178.33	190.32	196.52	196.75	191.00	179.45
250-300 deg	162.45	140.51	114.30	134.64	157.60	175.78
310-360 deg	188.61	195.71	196.86	192.04	181.37	165.20
Along Flow [m] (10 to 360 deg)						
10-60 deg	-50.53	-50.55	-49.03	-46.03	-41.63	-35.96
70-120 deg	-29.20	-21.55	-13.25	-28.86	-47.55	-64.79

130-180 deg	-80.07	-92.91	-102.93	-109.82	-113.38	-113.49
190-240 deg	-127.81	-139.77	-147.49	-150.72	-149.38	-143.49
250-300 deg	-133.25	-118.96	-101.05	-105.79	-110.06	-110.99
310-360 deg	-108.54	-102.80	-93.93	-82.21	-67.99	-51.71
Across Flow [m] (10 to 360 deg)						
10-60 deg	-38.46	-31.26	-23.10	-14.24	-4.94	4.50
70-120 deg	13.81	22.69	30.89	38.64	44.61	49.23
130-180 deg	52.34	53.87	53.77	52.02	48.70	43.90
190-240 deg	38.46	31.26	23.10	14.24	4.94	-4.50
250-300 deg	-13.81	-22.69	-30.89	-38.64	-44.61	-49.23
310-360 deg	-52.34	-53.87	-53.77	-52.02	-48.70	-43.90

Source ID: IDLEX_16

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-200.25	-198.32	-190.36	-176.63	-157.52	-133.63
70-120 deg	-105.68	-74.52	-41.09	-37.03	-36.91	-35.66
130-180 deg	-33.33	-29.99	-25.74	-20.71	-15.04	-8.92
190-240 deg	-51.02	-117.31	-180.03	-237.28	-287.32	-328.63
250-300 deg	-359.95	-380.34	-389.17	-416.60	-436.85	-443.83
310-360 deg	-437.32	-417.53	-385.05	-340.87	-286.33	-223.51

Source Pathway

Across Flow [m] (10 to 360 deg)						
10-60 deg	-189.78	-199.97	-204.08	-201.99	-193.77	-179.65
70-120 deg	-160.08	-135.64	-107.29	-74.61	-40.51	-5.17
130-180 deg	30.33	64.90	97.50	127.14	152.91	174.04
190-240 deg	189.78	199.97	204.08	201.99	193.77	179.65
250-300 deg	160.08	135.64	107.29	74.61	40.51	5.17
310-360 deg	-30.33	-64.90	-97.50	-127.14	-152.91	-174.04

Source ID: IDLEX_17

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-204.06	-207.06	-203.76	-194.27	-178.88	-158.05
70-120 deg	-132.42	-102.77	-69.99	-65.70	-64.48	-61.30
130-180 deg	-56.26	-49.50	-41.25	-31.74	-21.26	-10.14
190-240 deg	-47.21	-108.57	-166.63	-219.63	-265.96	-304.21
250-300 deg	-333.21	-352.09	-360.27	-387.93	-409.28	-418.19
310-360 deg	-414.40	-398.02	-369.54	-329.83	-280.11	-222.29
Across Flow [m] (10 to 360 deg)						
10-60 deg	-161.11	-172.40	-178.45	-179.07	-174.26	-164.15
70-120 deg	-149.05	-129.42	-106.07	-78.43	-49.24	-18.56
130-180 deg	12.68	43.54	73.08	100.40	124.66	145.14
190-240 deg	161.11	172.40	178.45	179.07	174.26	164.15

250-300 deg	149.05	129.42	106.07	78.43	49.24	18.56
310-360 deg	-12.68	-43.54	-73.08	-100.40	-124.66	-145.14

IDLEX_18

Heights [m] (10 to 360 deg)

10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19

Widths [m] (10 to 360 deg)

10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26

Lengths [m] (10 to 360 deg)

10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43

Along Flow [m] (10 to 360 deg)

10-60 deg	-210.01	-218.89	-221.12	-216.64	-205.57	-188.26
70-120 deg	-165.23	-137.17	-104.95	-100.16	-97.38	-91.64
130-180 deg	-83.12	-72.08	-58.84	-43.81	-27.46	-10.27
190-240 deg	-41.26	-96.73	-149.27	-197.26	-239.26	-274.00
250-300 deg	-300.40	-317.68	-325.31	-353.48	-376.38	-387.85
310-360 deg	-387.54	-375.45	-351.95	-317.76	-273.91	-222.16

Across Flow [m] (10 to 360 deg)

10-60 deg	-126.66	-139.50	-148.10	-152.21	-151.69	-146.55
70-120 deg	-136.97	-123.22	-105.94	-84.37	-61.08	-35.93
130-180 deg	-9.69	16.85	42.87	67.59	90.26	110.18
190-240 deg	126.66	139.50	148.10	152.21	151.69	146.55
250-300 deg	136.97	123.22	105.94	84.37	61.08	35.93
310-360 deg	9.69	-16.85	-42.87	-67.59	-90.26	-110.18

Source ID: **IDLEX_19**

Source Pathway

AERMOD

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-214.47	-229.07	-236.71	-237.15	-230.40	-216.64
70-120 deg	-196.30	-169.99	-138.52	-133.46	-129.40	-121.41
130-180 deg	-109.73	-94.72	-76.83	-56.60	-34.66	-11.66
190-240 deg	-36.80	-86.56	-133.69	-176.75	-214.44	-245.62
250-300 deg	-269.33	-284.86	-291.74	-320.17	-344.36	-358.08
310-360 deg	-360.93	-352.80	-333.96	-304.97	-266.71	-220.77
Across Flow [m] (10 to 360 deg)						
10-60 deg	-93.36	-107.48	-118.34	-125.60	-129.04	-128.57
70-120 deg	-124.18	-116.03	-104.55	-88.83	-71.25	-51.51
130-180 deg	-30.20	-7.98	14.49	36.52	57.44	76.61
190-240 deg	93.36	107.48	118.34	125.60	129.04	128.57
250-300 deg	124.18	116.03	104.55	88.83	71.25	51.51
310-360 deg	30.20	7.98	-14.49	-36.52	-57.44	-76.61

Source ID: IDLEX_20

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19

250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-220.90	-242.24	-256.23	-262.43	-260.66	-250.96
70-120 deg	-233.64	-209.23	-178.45	-172.87	-167.10	-156.25
130-180 deg	-140.65	-120.78	-97.23	-70.74	-42.09	-12.17
190-240 deg	-30.37	-73.38	-114.16	-151.47	-184.18	-211.29
250-300 deg	-231.99	-245.63	-251.81	-280.76	-306.66	-323.25
310-360 deg	-330.01	-326.75	-313.55	-290.83	-259.27	-220.26
Across Flow [m] (10 to 360 deg)						
10-60 deg	-53.95	-69.78	-83.50	-94.68	-102.98	-108.16
70-120 deg	-110.05	-108.59	-104.04	-95.26	-84.43	-71.03
130-180 deg	-55.48	-38.24	-19.83	-0.83	18.20	36.68
190-240 deg	53.95	69.78	83.50	94.68	102.98	108.16
250-300 deg	110.05	108.59	104.04	95.26	84.43	71.03
310-360 deg	55.48	38.24	19.83	0.83	-18.20	-36.68

Source ID: IDLEX_21

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39

130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-225.38	-251.41	-269.81	-280.01	-281.70	-274.84
70-120 deg	-259.62	-236.51	-206.22	-200.28	-193.31	-180.47
130-180 deg	-162.15	-138.89	-111.42	-80.57	-47.26	-12.52
190-240 deg	-25.89	-64.21	-100.58	-133.89	-163.13	-187.42
250-300 deg	-206.01	-218.34	-224.04	-253.35	-280.45	-299.02
310-360 deg	-308.51	-308.63	-299.36	-281.00	-254.11	-219.91
Across Flow [m] (10 to 360 deg)						
10-60 deg	-26.54	-43.57	-59.28	-73.18	-84.87	-93.97
70-120 deg	-100.22	-103.42	-103.70	-99.74	-93.60	-84.62
130-180 deg	-73.06	-59.29	-43.71	-26.80	-9.09	8.91
190-240 deg	26.54	43.57	59.28	73.18	84.87	93.97
250-300 deg	100.22	103.42	103.70	99.74	93.60	84.62
310-360 deg	73.06	59.29	43.71	26.80	9.08	-8.91

Source ID: IDLEX_22

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26

Source Pathway

AERMOD

Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-230.34	-262.18	-286.04	-301.22	-307.24	-303.93
70-120 deg	-291.38	-269.98	-240.38	-234.09	-225.75	-210.54
130-180 deg	-188.94	-161.60	-129.35	-93.17	-54.16	-13.50
190-240 deg	-20.93	-53.45	-84.35	-112.68	-137.60	-158.33
250-300 deg	-174.25	-184.87	-189.88	-219.54	-248.01	-268.95
310-360 deg	-281.71	-285.92	-281.44	-268.40	-247.21	-218.93
Across Flow [m] (10 to 360 deg)						
10-60 deg	7.27	-11.13	-29.20	-46.39	-62.16	-76.04
70-120 deg	-87.62	-96.53	-102.72	-104.71	-104.36	-100.85
130-180 deg	-94.27	-84.82	-72.80	-58.57	-42.56	-25.25
190-240 deg	-7.27	11.13	29.20	46.39	62.16	76.04
250-300 deg	87.62	96.53	102.72	104.71	104.36	100.85
310-360 deg	94.27	84.82	72.80	58.57	42.56	25.25

Source ID: **IDLEX_23**

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26

250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-235.46	-273.08	-302.40	-322.53	-332.86	-333.08
70-120 deg	-323.17	-303.45	-274.51	-267.84	-258.10	-240.51
130-180 deg	-215.62	-184.17	-147.13	-105.61	-60.89	-14.32
190-240 deg	-15.81	-42.55	-67.99	-91.37	-111.98	-129.18
250-300 deg	-142.45	-151.40	-155.75	-185.79	-215.66	-238.98
310-360 deg	-255.04	-263.35	-263.66	-255.96	-240.48	-218.11
Across Flow [m] (10 to 360 deg)						
10-60 deg	41.03	21.22	0.76	-19.71	-39.59	-58.27
70-120 deg	-75.17	-89.79	-101.90	-109.83	-115.27	-117.20
130-180 deg	-115.58	-110.44	-101.95	-90.36	-76.02	-59.38
190-240 deg	-41.03	-21.22	-0.76	19.71	39.59	58.27
250-300 deg	75.17	89.79	101.90	109.83	115.27	117.20
310-360 deg	115.58	110.44	101.95	90.36	76.02	59.38

IDLEX_24						
Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-241.72	-285.21	-320.04	-345.15	-359.76	-363.45
70-120 deg	-356.09	-337.91	-309.47	-302.24	-290.88	-270.69

130-180 deg	-242.27	-206.50	-164.44	-117.39	-66.78	-14.13
190-240 deg	-9.55	-30.41	-50.35	-68.76	-85.07	-98.81
250-300 deg	-109.54	-116.94	-120.79	-151.39	-182.88	-208.80
310-360 deg	-228.38	-241.03	-246.34	-244.18	-234.59	-218.30

Across Flow [m] (10 to 360 deg)

10-60 deg	75.42	54.00	30.95	6.95	-17.27	-40.95
70-120 deg	-63.39	-83.91	-102.09	-116.08	-127.40	-134.85
130-180 deg	-138.19	-137.34	-132.32	-123.28	-110.49	-94.34
190-240 deg	-75.42	-54.00	-30.95	-6.95	17.27	40.95
250-300 deg	63.39	83.91	102.09	116.08	127.40	134.85
310-360 deg	138.19	137.34	132.32	123.28	110.49	94.34

Source ID: IDLEX_25

Heights [m] (10 to 360 deg)

10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19

Widths [m] (10 to 360 deg)

10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26

Lengths [m] (10 to 360 deg)

10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43

Along Flow [m] (10 to 360 deg)

10-60 deg	-246.22	-295.44	-335.68	-365.73	-384.66	-391.90
70-120 deg	-387.24	-370.81	-343.11	-335.60	-322.96	-300.50
130-180 deg	-268.92	-229.16	-182.44	-130.18	-73.96	-15.49
190-240 deg	-5.05	-20.18	-34.71	-48.17	-60.18	-70.35
250-300 deg	-78.39	-84.05	-87.15	-118.03	-150.80	-178.99
310-360 deg	-201.74	-218.36	-228.35	-231.40	-227.41	-216.94

Source Pathway

Across Flow [m] (10 to 360 deg)

10-60 deg	108.79	86.08	60.76	33.59	5.40	-22.95
70-120 deg	-50.61	-76.73	-100.73	-120.59	-137.63	-150.49
130-180 deg	-158.78	-162.24	-160.77	-154.42	-143.38	-127.98
190-240 deg	-108.79	-86.08	-60.76	-33.59	-5.40	22.95
250-300 deg	50.61	76.73	100.73	120.59	137.63	150.49
310-360 deg	158.78	162.24	160.77	154.42	143.38	127.98

Source ID: IDLEX_26

Heights [m] (10 to 360 deg)

10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19

Widths [m] (10 to 360 deg)

10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26

Lengths [m] (10 to 360 deg)

10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43

Along Flow [m] (10 to 360 deg)

10-60 deg	-252.02	-306.65	-351.95	-386.57	-409.44	-419.86
70-120 deg	-417.53	-402.52	-375.27	-367.24	-353.11	-328.25
130-180 deg	-293.41	-249.66	-198.33	-140.97	-79.32	-15.27
190-240 deg	0.75	-8.98	-18.44	-27.33	-35.40	-42.39
250-300 deg	-48.10	-52.34	-54.99	-86.39	-120.65	-151.25
310-360 deg	-177.24	-197.86	-212.46	-220.60	-222.04	-217.16

Across Flow [m] (10 to 360 deg)

10-60 deg	140.42	116.23	88.50	58.08	25.90	-7.06
70-120 deg	-39.82	-71.36	-100.95	-126.39	-148.83	-166.76
130-180 deg	-179.62	-187.02	-188.74	-184.72	-175.09	-160.14
190-240 deg	-140.42	-116.23	-88.50	-58.08	-25.90	7.06

250-300 deg	39.82	71.36	100.95	126.39	148.83	166.76
310-360 deg	179.62	187.02	188.74	184.72	175.09	160.14

IDLEX_27

Heights [m] (10 to 360 deg)

10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19

Widths [m] (10 to 360 deg)

10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26

Lengths [m] (10 to 360 deg)

10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43

Along Flow [m] (10 to 360 deg)

10-60 deg	1.72	-3.72	-9.04	-14.09	-18.71	-22.76
70-120 deg	-26.12	-28.69	-30.38	-61.77	-96.34	-127.98
130-180 deg	-155.74	-178.76	-196.35	-207.98	-213.28	-212.11
190-240 deg	-252.99	-311.91	-361.35	-399.81	-426.13	-439.50
250-300 deg	-439.51	-426.17	-399.88	-391.86	-377.42	-351.51
310-360 deg	-314.92	-268.76	-214.43	-153.59	-88.08	-20.32

Across Flow [m] (10 to 360 deg)

10-60 deg	-165.05	-140.54	-111.76	-79.59	-45.00	-9.04
70-120 deg	27.19	62.60	95.90	127.35	154.09	176.15
130-180 deg	192.86	203.71	208.37	206.70	198.74	184.75
190-240 deg	165.05	140.54	111.76	79.59	45.00	9.04
250-300 deg	-27.19	-62.60	-95.90	-127.35	-154.09	-176.15
310-360 deg	-192.86	-203.71	-208.37	-206.70	-198.74	-184.75

Source ID: **IDLEX_28**

Source Pathway

AERMOD

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-2.04	-11.94	-21.46	-30.34	-38.30	-45.09
70-120 deg	-50.51	-54.40	-56.63	-87.76	-121.28	-151.12
130-180 deg	-176.37	-196.25	-210.18	-217.72	-218.64	-212.92
190-240 deg	-249.23	-303.69	-348.93	-383.56	-406.54	-417.17
250-300 deg	-415.12	-400.46	-373.63	-365.87	-352.48	-328.37
310-360 deg	-294.29	-251.27	-200.61	-143.85	-82.73	-19.51
Across Flow [m] (10 to 360 deg)						
10-60 deg	-139.06	-115.60	-88.63	-58.96	-27.51	4.79
70-120 deg	36.93	67.96	96.71	123.59	145.88	163.73
130-180 deg	176.61	184.12	186.04	182.31	173.03	158.50
190-240 deg	139.06	115.60	88.63	58.96	27.51	-4.79
250-300 deg	-36.93	-67.96	-96.71	-123.59	-145.88	-163.73
310-360 deg	-176.61	-184.12	-186.04	-182.31	-173.03	-158.50

Source ID: IDLEX_29

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19

250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-7.15	-22.68	-37.52	-51.22	-63.36	-73.58
70-120 deg	-81.57	-87.07	-89.93	-120.67	-152.81	-180.30
130-180 deg	-202.32	-218.19	-227.43	-229.75	-225.10	-213.61
190-240 deg	-244.12	-292.95	-332.87	-362.68	-381.47	-388.67
250-300 deg	-384.06	-367.78	-340.33	-332.96	-320.95	-299.19
310-360 deg	-268.34	-229.33	-183.36	-131.82	-76.27	-18.82
Across Flow [m] (10 to 360 deg)						
10-60 deg	-106.14	-84.07	-59.44	-33.01	-5.57	22.03
70-120 deg	48.97	74.42	97.40	118.49	135.14	147.68
130-180 deg	155.73	159.06	157.55	151.25	140.36	125.20
190-240 deg	106.14	84.07	59.44	33.01	5.57	-22.03
250-300 deg	-48.97	-74.42	-97.40	-118.49	-135.14	-147.68
310-360 deg	-155.73	-159.06	-157.55	-151.25	-140.36	-125.20

Source ID: IDLEX_30

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39

130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-12.12	-33.49	-53.84	-72.55	-89.07	-102.87
70-120 deg	-113.55	-120.78	-124.34	-154.74	-185.49	-210.61
130-180 deg	-229.34	-241.09	-245.52	-242.48	-232.08	-214.63
190-240 deg	-239.15	-282.14	-316.55	-341.35	-355.77	-359.38
250-300 deg	-352.08	-334.07	-305.92	-298.89	-288.27	-268.88
310-360 deg	-241.32	-206.43	-165.27	-119.09	-69.29	-17.80
Across Flow [m] (10 to 360 deg)						
10-60 deg	-72.08	-51.39	-29.13	-5.99	17.33	40.12
70-120 deg	61.70	81.40	98.42	113.52	124.33	131.36
130-180 deg	134.40	133.35	128.26	119.26	106.65	90.79
190-240 deg	72.08	51.39	29.13	5.99	-17.33	-40.12
250-300 deg	-61.70	-81.40	-98.42	-113.52	-124.33	-131.36
310-360 deg	-134.40	-133.35	-128.26	-119.26	-106.65	-90.79

Source ID: IDLEX_31

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26

Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-17.94	-45.13	-70.94	-94.60	-115.39	-132.66
70-120 deg	-145.91	-154.73	-158.84	-188.74	-217.97	-240.58
130-180 deg	-255.87	-263.39	-262.91	-254.44	-238.24	-214.80
190-240 deg	-233.33	-270.50	-299.45	-319.30	-329.45	-329.59
250-300 deg	-319.72	-300.13	-271.42	-264.89	-255.79	-238.92
310-360 deg	-214.78	-184.13	-147.87	-107.13	-63.13	-17.63
Across Flow [m] (10 to 360 deg)						
10-60 deg	-38.07	-18.91	0.83	20.54	39.63	57.52
70-120 deg	73.66	87.56	98.59	107.69	112.69	114.25
130-180 deg	112.35	107.03	98.46	86.90	72.70	56.29
190-240 deg	38.07	18.91	-0.83	-20.54	-39.63	-57.52
250-300 deg	-73.66	-87.56	-98.59	-107.69	-112.69	-114.25
310-360 deg	-112.35	-107.03	-98.46	-86.90	-72.70	-56.29

Source ID: IDLEX_32

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26

250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-22.43	-55.28	-86.44	-114.98	-140.02	-160.81
70-120 deg	-176.71	-187.25	-192.09	-221.71	-249.66	-270.02
130-180 deg	-282.18	-285.76	-280.66	-267.04	-245.29	-216.10
190-240 deg	-228.84	-260.35	-283.95	-298.92	-304.82	-301.45
250-300 deg	-288.92	-267.61	-238.17	-231.92	-224.10	-209.47
310-360 deg	-188.48	-161.76	-130.12	-94.54	-56.07	-16.33
Across Flow [m] (10 to 360 deg)						
10-60 deg	-5.10	12.78	30.28	46.85	62.00	75.27
70-120 deg	86.25	94.61	99.88	103.20	102.54	98.75
130-180 deg	91.97	82.40	70.32	56.10	40.18	23.04
190-240 deg	5.10	-12.78	-30.28	-46.85	-62.00	-75.27
250-300 deg	-86.25	-94.61	-99.89	-103.20	-102.54	-98.75
310-360 deg	-91.97	-82.40	-70.32	-56.10	-40.18	-23.04

IDLEX_33						
Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-27.60	-66.17	-102.74	-136.18	-165.48	-189.76
70-120 deg	-208.27	-220.45	-225.93	-255.16	-281.71	-299.69

130-180 deg	-308.57	-308.07	-298.21	-279.29	-251.88	-216.82
190-240 deg	-223.67	-249.45	-267.65	-277.72	-279.36	-272.50
250-300 deg	-257.36	-234.41	-204.33	-198.47	-192.05	-179.80
310-360 deg	-162.09	-139.45	-112.58	-82.28	-49.49	-15.61

Across Flow [m] (10 to 360 deg)

10-60 deg	28.35	44.83	59.94	73.24	84.31	92.81
70-120 deg	98.50	101.20	100.60	98.03	91.64	82.46
130-180 deg	70.77	56.94	41.37	24.55	6.98	-10.80
190-240 deg	-28.35	-44.83	-59.94	-73.24	-84.31	-92.81
250-300 deg	-98.50	-101.20	-100.60	-98.03	-91.64	-82.46
310-360 deg	-70.77	-56.94	-41.37	-24.55	-6.98	10.80

Source ID: IDLEX_34

Heights [m] (10 to 360 deg)

10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19

Widths [m] (10 to 360 deg)

10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26

Lengths [m] (10 to 360 deg)

10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43

Along Flow [m] (10 to 360 deg)

10-60 deg	-32.14	-76.40	-118.35	-156.69	-190.28	-218.08
70-120 deg	-239.26	-253.16	-259.38	-288.33	-313.58	-329.30
130-180 deg	-335.02	-330.56	-316.05	-291.94	-258.96	-218.11
190-240 deg	-219.13	-239.22	-252.05	-257.21	-254.56	-244.18
250-300 deg	-226.37	-201.69	-170.88	-165.30	-160.18	-150.19
310-360 deg	-135.64	-116.97	-94.74	-69.63	-42.41	-14.32

Source Pathway

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Across Flow [m] (10 to 360 deg)						
10-60 deg	61.51	76.70	89.56	99.69	106.80	110.66
70-120 deg	111.15	108.27	101.89	93.50	81.41	66.85
130-180 deg	50.26	32.14	13.05	-6.44	-25.74	-44.25
190-240 deg	-61.51	-76.70	-89.56	-99.69	-106.80	-110.66
250-300 deg	-111.15	-108.27	-101.89	-93.50	-81.41	-66.85
310-360 deg	-50.26	-32.14	-13.05	6.44	25.74	44.25

Source ID: IDLEX_35

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-38.61	-89.05	-136.77	-180.34	-218.43	-249.88
70-120 deg	-273.74	-289.29	-296.04	-324.41	-347.99	-361.00
130-180 deg	-363.03	-354.04	-334.28	-304.37	-265.22	-218.00
190-240 deg	-212.66	-226.58	-233.62	-233.56	-226.41	-212.37
250-300 deg	-191.89	-165.57	-134.22	-129.22	-125.77	-118.50
310-360 deg	-107.63	-93.48	-76.50	-57.20	-36.15	-14.43
Across Flow [m] (10 to 360 deg)						
10-60 deg	97.60	111.11	121.25	127.70	130.28	128.89
70-120 deg	123.59	114.53	101.78	87.02	68.77	48.43
130-180 deg	26.61	3.99	-18.76	-40.93	-61.86	-80.91
190-240 deg	-97.60	-111.11	-121.25	-127.70	-130.28	-128.89

250-300 deg	-123.59	-114.53	-101.78	-87.02	-68.77	-48.43
310-360 deg	-26.61	-3.99	18.76	40.93	61.86	80.91

IDLEX_36

Heights [m] (10 to 360 deg)

10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19

Widths [m] (10 to 360 deg)

10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26

Lengths [m] (10 to 360 deg)

10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43

Along Flow [m] (10 to 360 deg)

10-60 deg	-42.93	-98.78	-151.63	-199.86	-242.03	-276.84
70-120 deg	-303.24	-320.43	-327.88	-355.98	-378.33	-389.19
130-180 deg	-388.21	-375.44	-351.27	-316.42	-271.96	-219.23
190-240 deg	-208.34	-216.85	-218.77	-214.04	-202.81	-185.41
250-300 deg	-162.39	-134.43	-102.38	-97.65	-95.43	-90.31
310-360 deg	-82.44	-72.08	-59.52	-45.15	-29.41	-13.20

Across Flow [m] (10 to 360 deg)

10-60 deg	129.17	141.45	149.44	152.88	151.68	145.88
70-120 deg	135.63	121.27	103.01	82.70	59.03	33.57
130-180 deg	7.09	-19.61	-45.71	-70.43	-93.00	-112.75
190-240 deg	-129.17	-141.45	-149.44	-152.88	-151.68	-145.88
250-300 deg	-135.63	-121.27	-103.01	-82.70	-59.03	-33.57
310-360 deg	-7.09	19.61	45.71	70.43	93.00	112.75

Source ID: **IDLEX_37**

Source Pathway

AERMOD

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-48.27	-110.02	-168.42	-221.71	-268.27	-306.67
70-120 deg	-335.75	-354.63	-362.74	-390.44	-411.34	-419.74
130-180 deg	-415.39	-398.41	-369.33	-329.03	-278.73	-219.96
190-240 deg	-203.00	-205.61	-201.97	-192.19	-176.57	-155.59
250-300 deg	-129.88	-100.22	-67.52	-63.19	-62.42	-59.75
310-360 deg	-55.27	-49.11	-41.46	-32.54	-22.64	-12.47
Across Flow [m] (10 to 360 deg)						
10-60 deg	163.63	174.46	179.99	180.06	174.65	163.94
70-120 deg	148.24	128.04	103.74	77.37	47.80	16.77
130-180 deg	-14.76	-45.85	-75.54	-102.94	-127.21	-147.61
190-240 deg	-163.63	-174.46	-179.99	-180.06	-174.65	-163.94
250-300 deg	-148.24	-128.04	-103.74	-77.37	-47.80	-16.77
310-360 deg	14.76	45.85	75.54	102.94	127.21	147.61

Source ID: IDLEX_38

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19

250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-53.89	-120.57	-183.60	-241.05	-291.17	-332.44
70-120 deg	-363.62	-383.74	-392.21	-419.38	-438.86	-445.01
130-180 deg	-437.63	-416.96	-383.62	-338.63	-283.34	-219.45
190-240 deg	-197.38	-195.05	-186.79	-172.86	-153.67	-129.81
250-300 deg	-102.01	-71.11	-38.05	-34.26	-34.90	-34.49
310-360 deg	-33.02	-30.56	-27.16	-22.94	-18.02	-12.98
Across Flow [m] (10 to 360 deg)						
10-60 deg	192.56	201.98	205.26	202.31	193.20	178.23
70-120 deg	157.84	132.66	103.23	71.75	37.24	1.60
130-180 deg	-34.09	-68.75	-101.32	-130.80	-156.32	-177.08
190-240 deg	-192.56	-201.98	-205.26	-202.31	-193.20	-178.23
250-300 deg	-157.84	-132.66	-103.23	-71.75	-37.24	-1.60
310-360 deg	34.09	68.75	101.32	130.80	156.32	177.08

Source ID: TRU_16

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39

130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-200.25	-198.32	-190.36	-176.63	-157.52	-133.63
70-120 deg	-105.68	-74.52	-41.09	-37.03	-36.91	-35.66
130-180 deg	-33.33	-29.99	-25.74	-20.71	-15.04	-8.92
190-240 deg	-51.02	-117.31	-180.03	-237.28	-287.32	-328.63
250-300 deg	-359.95	-380.34	-389.17	-416.60	-436.85	-443.83
310-360 deg	-437.32	-417.53	-385.05	-340.87	-286.33	-223.51
Across Flow [m] (10 to 360 deg)						
10-60 deg	-189.78	-199.97	-204.08	-201.99	-193.77	-179.65
70-120 deg	-160.08	-135.64	-107.29	-74.61	-40.51	-5.17
130-180 deg	30.33	64.90	97.50	127.14	152.91	174.04
190-240 deg	189.78	199.97	204.08	201.99	193.77	179.65
250-300 deg	160.08	135.64	107.29	74.61	40.51	5.17
310-360 deg	-30.33	-64.90	-97.50	-127.14	-152.91	-174.04

Source ID: TRU_17

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26

Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-204.06	-207.06	-203.76	-194.27	-178.88	-158.05
70-120 deg	-132.42	-102.77	-69.99	-65.70	-64.48	-61.30
130-180 deg	-56.26	-49.50	-41.25	-31.74	-21.26	-10.14
190-240 deg	-47.21	-108.57	-166.63	-219.63	-265.96	-304.21
250-300 deg	-333.21	-352.09	-360.27	-387.93	-409.28	-418.19
310-360 deg	-414.40	-398.02	-369.54	-329.83	-280.11	-222.29
Across Flow [m] (10 to 360 deg)						
10-60 deg	-161.11	-172.40	-178.45	-179.07	-174.26	-164.15
70-120 deg	-149.05	-129.42	-106.07	-78.43	-49.24	-18.56
130-180 deg	12.68	43.54	73.08	100.40	124.66	145.14
190-240 deg	161.11	172.40	178.45	179.07	174.26	164.15
250-300 deg	149.05	129.42	106.07	78.43	49.24	18.56
310-360 deg	-12.68	-43.54	-73.08	-100.40	-124.66	-145.14

Source ID: TRU_18

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26

250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-210.01	-218.89	-221.12	-216.64	-205.57	-188.26
70-120 deg	-165.23	-137.17	-104.95	-100.16	-97.38	-91.64
130-180 deg	-83.12	-72.08	-58.84	-43.81	-27.46	-10.27
190-240 deg	-41.26	-96.73	-149.27	-197.26	-239.26	-274.00
250-300 deg	-300.40	-317.68	-325.31	-353.48	-376.38	-387.85
310-360 deg	-387.54	-375.45	-351.95	-317.76	-273.91	-222.16
Across Flow [m] (10 to 360 deg)						
10-60 deg	-126.66	-139.50	-148.10	-152.21	-151.69	-146.55
70-120 deg	-136.97	-123.22	-105.94	-84.37	-61.08	-35.93
130-180 deg	-9.69	16.85	42.87	67.59	90.26	110.18
190-240 deg	126.66	139.50	148.10	152.21	151.69	146.55
250-300 deg	136.97	123.22	105.94	84.37	61.08	35.93
310-360 deg	9.69	-16.85	-42.87	-67.59	-90.26	-110.18

TRU_19

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-214.47	-229.07	-236.71	-237.15	-230.40	-216.64
70-120 deg	-196.30	-169.99	-138.52	-133.46	-129.40	-121.41

130-180 deg	-109.73	-94.72	-76.83	-56.60	-34.66	-11.66
190-240 deg	-36.80	-86.56	-133.69	-176.75	-214.44	-245.62
250-300 deg	-269.33	-284.86	-291.74	-320.17	-344.36	-358.08
310-360 deg	-360.93	-352.80	-333.96	-304.97	-266.71	-220.77
Across Flow [m] (10 to 360 deg)						
10-60 deg	-93.36	-107.48	-118.34	-125.60	-129.04	-128.57
70-120 deg	-124.18	-116.03	-104.55	-88.83	-71.25	-51.51
130-180 deg	-30.20	-7.98	14.49	36.52	57.44	76.61
190-240 deg	93.36	107.48	118.34	125.60	129.04	128.57
250-300 deg	124.18	116.03	104.55	88.83	71.25	51.51
310-360 deg	30.20	7.98	-14.49	-36.52	-57.44	-76.61

Source ID: TRU_20

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-220.90	-242.24	-256.23	-262.43	-260.66	-250.96
70-120 deg	-233.64	-209.23	-178.45	-172.87	-167.10	-156.25
130-180 deg	-140.65	-120.78	-97.23	-70.74	-42.09	-12.17
190-240 deg	-30.37	-73.38	-114.16	-151.47	-184.18	-211.29
250-300 deg	-231.99	-245.63	-251.81	-280.76	-306.66	-323.25
310-360 deg	-330.01	-326.75	-313.55	-290.83	-259.27	-220.26

Across Flow [m] (10 to 360 deg)						
10-60 deg	-53.95	-69.78	-83.50	-94.68	-102.98	-108.16
70-120 deg	-110.05	-108.59	-104.04	-95.26	-84.43	-71.03
130-180 deg	-55.48	-38.24	-19.83	-0.83	18.20	36.68
190-240 deg	53.95	69.78	83.50	94.68	102.98	108.16
250-300 deg	110.05	108.59	104.04	95.26	84.43	71.03
310-360 deg	55.48	38.24	19.83	0.83	-18.20	-36.68

Source ID: TRU_21

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-225.38	-251.41	-269.81	-280.01	-281.70	-274.84
70-120 deg	-259.62	-236.51	-206.22	-200.28	-193.31	-180.47
130-180 deg	-162.15	-138.89	-111.42	-80.57	-47.26	-12.52
190-240 deg	-25.89	-64.21	-100.58	-133.89	-163.13	-187.42
250-300 deg	-206.01	-218.34	-224.04	-253.35	-280.45	-299.02
310-360 deg	-308.51	-308.63	-299.36	-281.00	-254.11	-219.91
Across Flow [m] (10 to 360 deg)						
10-60 deg	-26.54	-43.57	-59.28	-73.18	-84.87	-93.97
70-120 deg	-100.22	-103.42	-103.70	-99.74	-93.60	-84.62
130-180 deg	-73.06	-59.29	-43.71	-26.80	-9.09	8.91
190-240 deg	26.54	43.57	59.28	73.18	84.87	93.97

250-300 deg	100.22	103.42	103.70	99.74	93.60	84.62
310-360 deg	73.06	59.29	43.71	26.80	9.08	-8.91

TRU_22

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-230.34	-262.18	-286.04	-301.22	-307.24	-303.93
70-120 deg	-291.38	-269.98	-240.38	-234.09	-225.75	-210.54
130-180 deg	-188.94	-161.60	-129.35	-93.17	-54.16	-13.50
190-240 deg	-20.93	-53.45	-84.35	-112.68	-137.60	-158.33
250-300 deg	-174.25	-184.87	-189.88	-219.54	-248.01	-268.95
310-360 deg	-281.71	-285.92	-281.44	-268.40	-247.21	-218.93
Across Flow [m] (10 to 360 deg)						
10-60 deg	7.27	-11.13	-29.20	-46.39	-62.16	-76.04
70-120 deg	-87.62	-96.53	-102.72	-104.71	-104.36	-100.85
130-180 deg	-94.27	-84.82	-72.80	-58.57	-42.56	-25.25
190-240 deg	-7.27	11.13	29.20	46.39	62.16	76.04
250-300 deg	87.62	96.53	102.72	104.71	104.36	100.85
310-360 deg	94.27	84.82	72.80	58.57	42.56	25.25

Source ID: **TRU_23**

Source Pathway

AERMOD

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-235.46	-273.08	-302.40	-322.53	-332.86	-333.08
70-120 deg	-323.17	-303.45	-274.51	-267.84	-258.10	-240.51
130-180 deg	-215.62	-184.17	-147.13	-105.61	-60.89	-14.32
190-240 deg	-15.81	-42.55	-67.99	-91.37	-111.98	-129.18
250-300 deg	-142.45	-151.40	-155.75	-185.79	-215.66	-238.98
310-360 deg	-255.04	-263.35	-263.66	-255.96	-240.48	-218.11
Across Flow [m] (10 to 360 deg)						
10-60 deg	41.03	21.22	0.76	-19.71	-39.59	-58.27
70-120 deg	-75.17	-89.79	-101.90	-109.83	-115.27	-117.20
130-180 deg	-115.58	-110.44	-101.95	-90.36	-76.02	-59.38
190-240 deg	-41.03	-21.22	-0.76	19.71	39.59	58.27
250-300 deg	75.17	89.79	101.90	109.83	115.27	117.20
310-360 deg	115.58	110.44	101.95	90.36	76.02	59.38

Source ID: TRU_24

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19

250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-241.72	-285.21	-320.04	-345.15	-359.76	-363.45
70-120 deg	-356.09	-337.91	-309.47	-302.24	-290.88	-270.69
130-180 deg	-242.27	-206.50	-164.44	-117.39	-66.78	-14.13
190-240 deg	-9.55	-30.41	-50.35	-68.76	-85.07	-98.81
250-300 deg	-109.54	-116.94	-120.79	-151.39	-182.88	-208.80
310-360 deg	-228.38	-241.03	-246.34	-244.18	-234.59	-218.30
Across Flow [m] (10 to 360 deg)						
10-60 deg	75.42	54.00	30.95	6.95	-17.27	-40.95
70-120 deg	-63.39	-83.91	-102.09	-116.08	-127.40	-134.85
130-180 deg	-138.19	-137.34	-132.32	-123.28	-110.49	-94.34
190-240 deg	-75.42	-54.00	-30.95	-6.95	17.27	40.95
250-300 deg	63.39	83.91	102.09	116.08	127.40	134.85
310-360 deg	138.19	137.34	132.32	123.28	110.49	94.34

Source ID: TRU_25

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39

130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-246.22	-295.44	-335.68	-365.73	-384.66	-391.90
70-120 deg	-387.24	-370.81	-343.11	-335.60	-322.96	-300.50
130-180 deg	-268.92	-229.16	-182.44	-130.18	-73.96	-15.49
190-240 deg	-5.05	-20.18	-34.71	-48.17	-60.18	-70.35
250-300 deg	-78.39	-84.05	-87.15	-118.03	-150.80	-178.99
310-360 deg	-201.74	-218.36	-228.35	-231.40	-227.41	-216.94
Across Flow [m] (10 to 360 deg)						
10-60 deg	108.79	86.08	60.76	33.59	5.40	-22.95
70-120 deg	-50.61	-76.73	-100.73	-120.59	-137.63	-150.49
130-180 deg	-158.78	-162.24	-160.77	-154.42	-143.38	-127.98
190-240 deg	-108.79	-86.08	-60.76	-33.59	-5.40	22.95
250-300 deg	50.61	76.73	100.73	120.59	137.63	150.49
310-360 deg	158.78	162.24	160.77	154.42	143.38	127.98

Source ID: TRU_26

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26

Source Pathway

AERMOD

Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-252.02	-306.65	-351.95	-386.57	-409.44	-419.86
70-120 deg	-417.53	-402.52	-375.27	-367.24	-353.11	-328.25
130-180 deg	-293.41	-249.66	-198.33	-140.97	-79.32	-15.27
190-240 deg	0.75	-8.98	-18.44	-27.33	-35.40	-42.39
250-300 deg	-48.10	-52.34	-54.99	-86.39	-120.65	-151.25
310-360 deg	-177.24	-197.86	-212.46	-220.60	-222.04	-217.16
Across Flow [m] (10 to 360 deg)						
10-60 deg	140.42	116.23	88.50	58.08	25.90	-7.06
70-120 deg	-39.82	-71.36	-100.95	-126.39	-148.83	-166.76
130-180 deg	-179.62	-187.02	-188.74	-184.72	-175.09	-160.14
190-240 deg	-140.42	-116.23	-88.50	-58.08	-25.90	7.06
250-300 deg	39.82	71.36	100.95	126.39	148.83	166.76
310-360 deg	179.62	187.02	188.74	184.72	175.09	160.14

Source ID: TRU_27

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26

250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	1.72	-3.72	-9.04	-14.09	-18.71	-22.76
70-120 deg	-26.12	-28.69	-30.38	-61.77	-96.34	-127.98
130-180 deg	-155.74	-178.76	-196.35	-207.98	-213.28	-212.11
190-240 deg	-252.99	-311.91	-361.35	-399.81	-426.13	-439.50
250-300 deg	-439.51	-426.17	-399.88	-391.86	-377.42	-351.51
310-360 deg	-314.92	-268.76	-214.43	-153.59	-88.08	-20.32
Across Flow [m] (10 to 360 deg)						
10-60 deg	-165.05	-140.54	-111.76	-79.59	-45.00	-9.04
70-120 deg	27.19	62.60	95.90	127.35	154.09	176.15
130-180 deg	192.86	203.71	208.37	206.70	198.74	184.75
190-240 deg	165.05	140.54	111.76	79.59	45.00	9.04
250-300 deg	-27.19	-62.60	-95.90	-127.35	-154.09	-176.15
310-360 deg	-192.86	-203.71	-208.37	-206.70	-198.74	-184.75

TRU_28

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-2.04	-11.94	-21.46	-30.34	-38.30	-45.09
70-120 deg	-50.51	-54.40	-56.63	-87.76	-121.28	-151.12

130-180 deg	-176.37	-196.25	-210.18	-217.72	-218.64	-212.92
190-240 deg	-249.23	-303.69	-348.93	-383.56	-406.54	-417.17
250-300 deg	-415.12	-400.46	-373.63	-365.87	-352.48	-328.37
310-360 deg	-294.29	-251.27	-200.61	-143.85	-82.73	-19.51
Across Flow [m] (10 to 360 deg)						
10-60 deg	-139.06	-115.60	-88.63	-58.96	-27.51	4.79
70-120 deg	36.93	67.96	96.71	123.59	145.88	163.73
130-180 deg	176.61	184.12	186.04	182.31	173.03	158.50
190-240 deg	139.06	115.60	88.63	58.96	27.51	-4.79
250-300 deg	-36.93	-67.96	-96.71	-123.59	-145.88	-163.73
310-360 deg	-176.61	-184.12	-186.04	-182.31	-173.03	-158.50

Source ID: TRU_29

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-7.15	-22.68	-37.52	-51.22	-63.36	-73.58
70-120 deg	-81.57	-87.07	-89.93	-120.67	-152.81	-180.30
130-180 deg	-202.32	-218.19	-227.43	-229.75	-225.10	-213.61
190-240 deg	-244.12	-292.95	-332.87	-362.68	-381.47	-388.67
250-300 deg	-384.06	-367.78	-340.33	-332.96	-320.95	-299.19
310-360 deg	-268.34	-229.33	-183.36	-131.82	-76.27	-18.82

Source Pathway

AERMOD

Across Flow [m] (10 to 360 deg)

10-60 deg	-106.14	-84.07	-59.44	-33.01	-5.57	22.03
70-120 deg	48.97	74.42	97.40	118.49	135.14	147.68
130-180 deg	155.73	159.06	157.55	151.25	140.36	125.20
190-240 deg	106.14	84.07	59.44	33.01	5.57	-22.03
250-300 deg	-48.97	-74.42	-97.40	-118.49	-135.14	-147.68
310-360 deg	-155.73	-159.06	-157.55	-151.25	-140.36	-125.20

Source ID: TRU_30

Heights [m] (10 to 360 deg)

10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19

Widths [m] (10 to 360 deg)

10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26

Lengths [m] (10 to 360 deg)

10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43

Along Flow [m] (10 to 360 deg)

10-60 deg	-12.12	-33.49	-53.84	-72.55	-89.07	-102.87
70-120 deg	-113.55	-120.78	-124.34	-154.74	-185.49	-210.61
130-180 deg	-229.34	-241.09	-245.52	-242.48	-232.08	-214.63
190-240 deg	-239.15	-282.14	-316.55	-341.35	-355.77	-359.38
250-300 deg	-352.08	-334.07	-305.92	-298.89	-288.27	-268.88
310-360 deg	-241.32	-206.43	-165.27	-119.09	-69.29	-17.80

Across Flow [m] (10 to 360 deg)

10-60 deg	-72.08	-51.39	-29.13	-5.99	17.33	40.12
70-120 deg	61.70	81.40	98.42	113.52	124.33	131.36
130-180 deg	134.40	133.35	128.26	119.26	106.65	90.79
190-240 deg	72.08	51.39	29.13	5.99	-17.33	-40.12

250-300 deg	-61.70	-81.40	-98.42	-113.52	-124.33	-131.36
310-360 deg	-134.40	-133.35	-128.26	-119.26	-106.65	-90.79

TRU_31

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-17.94	-45.13	-70.94	-94.60	-115.39	-132.66
70-120 deg	-145.91	-154.73	-158.84	-188.74	-217.97	-240.58
130-180 deg	-255.87	-263.39	-262.91	-254.44	-238.24	-214.80
190-240 deg	-233.33	-270.50	-299.45	-319.30	-329.45	-329.59
250-300 deg	-319.72	-300.13	-271.42	-264.89	-255.79	-238.92
310-360 deg	-214.78	-184.13	-147.87	-107.13	-63.13	-17.63
Across Flow [m] (10 to 360 deg)						
10-60 deg	-38.07	-18.91	0.83	20.54	39.63	57.52
70-120 deg	73.66	87.56	98.59	107.69	112.69	114.25
130-180 deg	112.35	107.03	98.46	86.90	72.70	56.29
190-240 deg	38.07	18.91	-0.83	-20.54	-39.63	-57.52
250-300 deg	-73.66	-87.56	-98.59	-107.69	-112.69	-114.25
310-360 deg	-112.35	-107.03	-98.46	-86.90	-72.70	-56.29

Source ID: **TRU_32**

Source Pathway

AERMOD

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-22.43	-55.28	-86.44	-114.98	-140.02	-160.81
70-120 deg	-176.71	-187.25	-192.09	-221.71	-249.66	-270.02
130-180 deg	-282.18	-285.76	-280.66	-267.04	-245.29	-216.10
190-240 deg	-228.84	-260.35	-283.95	-298.92	-304.82	-301.45
250-300 deg	-288.92	-267.61	-238.17	-231.92	-224.10	-209.47
310-360 deg	-188.48	-161.76	-130.12	-94.54	-56.07	-16.33
Across Flow [m] (10 to 360 deg)						
10-60 deg	-5.10	12.78	30.28	46.85	62.00	75.27
70-120 deg	86.25	94.61	99.88	103.20	102.54	98.75
130-180 deg	91.97	82.40	70.32	56.10	40.18	23.04
190-240 deg	5.10	-12.78	-30.28	-46.85	-62.00	-75.27
250-300 deg	-86.25	-94.61	-99.89	-103.20	-102.54	-98.75
310-360 deg	-91.97	-82.40	-70.32	-56.10	-40.18	-23.04

Source ID: TRU_33

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19

250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-27.60	-66.17	-102.74	-136.18	-165.48	-189.76
70-120 deg	-208.27	-220.45	-225.93	-255.16	-281.71	-299.69
130-180 deg	-308.57	-308.07	-298.21	-279.29	-251.88	-216.82
190-240 deg	-223.67	-249.45	-267.65	-277.72	-279.36	-272.50
250-300 deg	-257.36	-234.41	-204.33	-198.47	-192.05	-179.80
310-360 deg	-162.09	-139.45	-112.58	-82.28	-49.49	-15.61
Across Flow [m] (10 to 360 deg)						
10-60 deg	28.35	44.83	59.94	73.24	84.31	92.81
70-120 deg	98.50	101.20	100.60	98.03	91.64	82.46
130-180 deg	70.77	56.94	41.37	24.55	6.98	-10.80
190-240 deg	-28.35	-44.83	-59.94	-73.24	-84.31	-92.81
250-300 deg	-98.50	-101.20	-100.60	-98.03	-91.64	-82.46
310-360 deg	-70.77	-56.94	-41.37	-24.55	-6.98	10.80

Source ID: TRU_34

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39

130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-32.14	-76.40	-118.35	-156.69	-190.28	-218.08
70-120 deg	-239.26	-253.16	-259.38	-288.33	-313.58	-329.30
130-180 deg	-335.02	-330.56	-316.05	-291.94	-258.96	-218.11
190-240 deg	-219.13	-239.22	-252.05	-257.21	-254.56	-244.18
250-300 deg	-226.37	-201.69	-170.88	-165.30	-160.18	-150.19
310-360 deg	-135.64	-116.97	-94.74	-69.63	-42.41	-14.32
Across Flow [m] (10 to 360 deg)						
10-60 deg	61.51	76.70	89.56	99.69	106.80	110.66
70-120 deg	111.15	108.27	101.89	93.50	81.41	66.85
130-180 deg	50.26	32.14	13.05	-6.44	-25.74	-44.25
190-240 deg	-61.51	-76.70	-89.56	-99.69	-106.80	-110.66
250-300 deg	-111.15	-108.27	-101.89	-93.50	-81.41	-66.85
310-360 deg	-50.26	-32.14	-13.05	6.44	25.74	44.25

Source ID: TRU_35

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26

Source Pathway

AERMOD

Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-38.61	-89.05	-136.77	-180.34	-218.43	-249.88
70-120 deg	-273.74	-289.29	-296.04	-324.41	-347.99	-361.00
130-180 deg	-363.03	-354.04	-334.28	-304.37	-265.22	-218.00
190-240 deg	-212.66	-226.58	-233.62	-233.56	-226.41	-212.37
250-300 deg	-191.89	-165.57	-134.22	-129.22	-125.77	-118.50
310-360 deg	-107.63	-93.48	-76.50	-57.20	-36.15	-14.43
Across Flow [m] (10 to 360 deg)						
10-60 deg	97.60	111.11	121.25	127.70	130.28	128.89
70-120 deg	123.59	114.53	101.78	87.02	68.77	48.43
130-180 deg	26.61	3.99	-18.76	-40.93	-61.86	-80.91
190-240 deg	-97.60	-111.11	-121.25	-127.70	-130.28	-128.89
250-300 deg	-123.59	-114.53	-101.78	-87.02	-68.77	-48.43
310-360 deg	-26.61	-3.99	18.76	40.93	61.86	80.91

Source ID: TRU_36

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26

250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-42.93	-98.78	-151.63	-199.86	-242.03	-276.84
70-120 deg	-303.24	-320.43	-327.88	-355.98	-378.33	-389.19
130-180 deg	-388.21	-375.44	-351.27	-316.42	-271.96	-219.23
190-240 deg	-208.34	-216.85	-218.77	-214.04	-202.81	-185.41
250-300 deg	-162.39	-134.43	-102.38	-97.65	-95.43	-90.31
310-360 deg	-82.44	-72.08	-59.52	-45.15	-29.41	-13.20
Across Flow [m] (10 to 360 deg)						
10-60 deg	129.17	141.45	149.44	152.88	151.68	145.88
70-120 deg	135.63	121.27	103.01	82.70	59.03	33.57
130-180 deg	7.09	-19.61	-45.71	-70.43	-93.00	-112.75
190-240 deg	-129.17	-141.45	-149.44	-152.88	-151.68	-145.88
250-300 deg	-135.63	-121.27	-103.01	-82.70	-59.03	-33.57
310-360 deg	-7.09	19.61	45.71	70.43	93.00	112.75

TRU_37						
Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-48.27	-110.02	-168.42	-221.71	-268.27	-306.67
70-120 deg	-335.75	-354.63	-362.74	-390.44	-411.34	-419.74

130-180 deg	-415.39	-398.41	-369.33	-329.03	-278.73	-219.96
190-240 deg	-203.00	-205.61	-201.97	-192.19	-176.57	-155.59
250-300 deg	-129.88	-100.22	-67.52	-63.19	-62.42	-59.75
310-360 deg	-55.27	-49.11	-41.46	-32.54	-22.64	-12.47

Across Flow [m] (10 to 360 deg)

10-60 deg	163.63	174.46	179.99	180.06	174.65	163.94
70-120 deg	148.24	128.04	103.74	77.37	47.80	16.77
130-180 deg	-14.76	-45.85	-75.54	-102.94	-127.21	-147.61
190-240 deg	-163.63	-174.46	-179.99	-180.06	-174.65	-163.94
250-300 deg	-148.24	-128.04	-103.74	-77.37	-47.80	-16.77
310-360 deg	14.76	45.85	75.54	102.94	127.21	147.61

Source ID: TRU_38

Heights [m] (10 to 360 deg)

10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19

Widths [m] (10 to 360 deg)

10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26

Lengths [m] (10 to 360 deg)

10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43

Along Flow [m] (10 to 360 deg)

10-60 deg	-53.89	-120.57	-183.60	-241.05	-291.17	-332.44
70-120 deg	-363.62	-383.74	-392.21	-419.38	-438.86	-445.01
130-180 deg	-437.63	-416.96	-383.62	-338.63	-283.34	-219.45
190-240 deg	-197.38	-195.05	-186.79	-172.86	-153.67	-129.81
250-300 deg	-102.01	-71.11	-38.05	-34.26	-34.90	-34.49
310-360 deg	-33.02	-30.56	-27.16	-22.94	-18.02	-12.98

Source Pathway

AERMOD

Across Flow [m] (10 to 360 deg)

10-60 deg	192.56	201.98	205.26	202.31	193.20	178.23
70-120 deg	157.84	132.66	103.23	71.75	37.24	1.60
130-180 deg	-34.09	-68.75	-101.32	-130.80	-156.32	-177.08
190-240 deg	-192.56	-201.98	-205.26	-202.31	-193.20	-178.23
250-300 deg	-157.84	-132.66	-103.23	-71.75	-37.24	-1.60
310-360 deg	34.09	68.75	101.32	130.80	156.32	177.08

Source ID: EGEN1

Heights [m] (10 to 360 deg)

10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19

Widths [m] (10 to 360 deg)

10-60 deg	259.80	268.48	269.00	261.36	245.77	222.71
70-120 deg	192.89	157.20	116.74	145.63	182.60	214.01
130-180 deg	238.93	256.58	266.44	268.21	261.82	247.48
190-240 deg	259.80	268.48	269.00	261.36	245.77	222.71
250-300 deg	192.89	157.20	116.74	145.63	182.60	214.01
310-360 deg	238.93	256.58	266.44	268.21	261.82	247.48

Lengths [m] (10 to 360 deg)

10-60 deg	145.63	182.60	214.01	238.93	256.58	266.44
70-120 deg	268.21	261.82	247.48	259.80	268.48	269.00
130-180 deg	261.36	245.77	222.71	192.89	157.20	116.74
190-240 deg	145.63	182.60	214.01	238.93	256.58	266.44
250-300 deg	268.21	261.82	247.48	259.80	268.48	269.00
310-360 deg	261.36	245.77	222.71	192.89	157.20	116.74

Along Flow [m] (10 to 360 deg)

10-60 deg	-47.43	-89.21	-128.29	-163.46	-193.67	-217.99
70-120 deg	-235.69	-246.22	-249.28	-261.28	-268.07	-266.72
130-180 deg	-257.27	-240.00	-215.44	-184.33	-147.62	-106.43
190-240 deg	-98.20	-93.38	-85.73	-75.47	-62.92	-48.46
250-300 deg	-32.52	-15.60	1.80	1.48	-0.41	-2.28
310-360 deg	-4.08	-5.76	-7.27	-8.55	-9.58	-10.31

Across Flow [m] (10 to 360 deg)

10-60 deg	131.38	133.83	132.22	126.59	117.12	104.09
70-120 deg	87.89	69.02	48.06	25.38	2.08	-21.28
130-180 deg	-43.99	-65.37	-84.77	-101.58	-115.31	-125.54
190-240 deg	-131.38	-133.83	-132.22	-126.59	-117.12	-104.09

250-300 deg	-87.89	-69.02	-48.06	-25.38	-2.08	21.28
310-360 deg	43.99	65.37	84.77	101.58	115.31	125.54

EGEN2

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	256.08	260.85	257.69	246.70	228.22	202.80
70-120 deg	171.22	134.44	93.57	122.56	160.64	193.84
130-180 deg	221.14	241.73	254.97	260.47	258.05	247.79
190-240 deg	256.08	260.85	257.69	246.70	228.22	202.80
250-300 deg	171.22	134.44	93.57	122.56	160.64	193.84
310-360 deg	221.14	241.73	254.97	260.47	258.05	247.79
Lengths [m] (10 to 360 deg)						
10-60 deg	122.56	160.64	193.84	221.14	241.73	254.97
70-120 deg	260.47	258.05	247.79	256.08	260.85	257.69
130-180 deg	246.70	228.22	202.80	171.22	134.44	93.57
190-240 deg	122.56	160.64	193.84	221.14	241.73	254.97
250-300 deg	260.47	258.05	247.79	256.08	260.85	257.69
310-360 deg	246.70	228.22	202.80	171.22	134.44	93.57
Along Flow [m] (10 to 360 deg)						
10-60 deg	-48.91	-90.44	-129.22	-164.07	-193.94	-217.91
70-120 deg	-235.27	-245.47	-248.22	-255.56	-258.18	-252.96
130-180 deg	-240.05	-219.85	-192.97	-160.22	-122.61	-81.27
190-240 deg	-73.65	-70.20	-64.62	-57.07	-47.79	-37.06
250-300 deg	-25.20	-12.58	0.43	-0.52	-2.67	-4.73
310-360 deg	-6.65	-8.37	-9.83	-11.00	-11.83	-12.30
Across Flow [m] (10 to 360 deg)						
10-60 deg	127.52	127.76	124.11	116.70	105.74	91.57
70-120 deg	74.61	55.39	34.48	12.37	-10.12	-32.30
130-180 deg	-53.50	-73.08	-90.43	-105.03	-116.45	-124.32
190-240 deg	-127.52	-127.76	-124.11	-116.70	-105.74	-91.57
250-300 deg	-74.61	-55.39	-34.48	-12.37	10.12	32.30
310-360 deg	53.50	73.08	90.43	105.03	116.45	124.32

Source ID: **EGEN3**

Source Pathway

AERMOD

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	134.64	157.60	175.78	188.61	195.71	196.86
70-120 deg	192.04	181.37	165.20	178.33	190.32	196.52
130-180 deg	196.75	191.00	179.45	162.45	140.51	114.30
190-240 deg	134.64	157.60	175.78	188.61	195.71	196.86
250-300 deg	192.04	181.37	165.20	178.33	190.32	196.52
310-360 deg	196.75	191.00	179.45	162.45	140.51	114.30
Lengths [m] (10 to 360 deg)						
10-60 deg	178.33	190.32	196.52	196.75	191.00	179.45
70-120 deg	162.45	140.51	114.30	134.64	157.60	175.78
130-180 deg	188.61	195.71	196.86	192.04	181.37	165.20
190-240 deg	178.33	190.32	196.52	196.75	191.00	179.45
250-300 deg	162.45	140.51	114.30	134.64	157.60	175.78
310-360 deg	188.61	195.71	196.86	192.04	181.37	165.20
Along Flow [m] (10 to 360 deg)						
10-60 deg	-11.97	-10.73	-9.16	-7.31	-5.24	-3.01
70-120 deg	-0.69	1.65	3.94	-18.20	-43.75	-67.96
130-180 deg	-90.12	-109.53	-125.62	-137.89	-145.97	-149.61
190-240 deg	-166.36	-179.59	-187.36	-189.44	-185.76	-176.44
250-300 deg	-161.76	-142.16	-118.24	-116.44	-113.86	-107.81
310-360 deg	-98.49	-86.18	-71.25	-54.15	-35.41	-15.59
Across Flow [m] (10 to 360 deg)						
10-60 deg	-49.12	-35.06	-19.92	-4.19	11.68	27.18
70-120 deg	41.87	55.28	67.01	77.20	84.43	89.10
130-180 deg	91.06	90.26	86.71	80.53	71.90	61.09
190-240 deg	49.12	35.06	19.92	4.19	-11.68	-27.18
250-300 deg	-41.87	-55.28	-67.01	-77.20	-84.43	-89.10
310-360 deg	-91.06	-90.26	-86.71	-80.53	-71.90	-61.09

Source ID: EGEN4_1

Heights [m] (10 to 360 deg)						
10-60 deg	0.00	0.00	0.00	0.00	12.19	12.19
70-120 deg	12.19	12.19	12.19	12.19	12.19	12.19
130-180 deg	12.19	12.19	12.19	12.19	12.19	12.19
190-240 deg	0.00	0.00	0.00	0.00	12.19	12.19

250-300 deg	12.19	12.19	12.19	12.19	12.19	12.19
310-360 deg	12.19	12.19	12.19	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	0.00	0.00	0.00	0.00	447.52	410.79
70-120 deg	361.57	301.37	232.43	251.27	315.63	370.39
130-180 deg	413.90	444.84	462.26	465.63	454.86	430.26
190-240 deg	0.00	0.00	0.00	0.00	447.52	410.79
250-300 deg	361.57	301.37	232.43	251.27	315.63	370.39
310-360 deg	413.90	444.84	462.26	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	0.00	0.00	0.00	0.00	444.84	462.26
70-120 deg	465.63	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	232.43
190-240 deg	0.00	0.00	0.00	0.00	444.84	462.26
250-300 deg	465.63	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	0.00	0.00	0.00	0.00	-310.76	-358.05
70-120 deg	-394.46	-418.88	-430.58	-459.81	-480.13	-485.86
130-180 deg	-476.83	-453.31	-416.02	-366.08	-305.02	-234.70
190-240 deg	0.00	0.00	0.00	0.00	-134.08	-104.21
250-300 deg	-71.17	-35.97	0.32	6.18	6.37	6.37
310-360 deg	6.17	5.79	5.23	4.51	3.66	2.27
Across Flow [m] (10 to 360 deg)						
10-60 deg	0.00	0.00	0.00	0.00	229.55	210.62
70-120 deg	185.30	154.34	118.48	80.10	38.45	-4.38
130-180 deg	-47.08	-88.34	-126.92	-161.64	-191.46	-215.45
190-240 deg	0.00	0.00	0.00	0.00	-229.55	-210.62
250-300 deg	-185.30	-154.34	-118.48	-80.10	-38.45	4.38
310-360 deg	47.08	88.34	126.92	161.64	191.46	215.45

Source ID: EGEN4_2

Heights [m] (10 to 360 deg)						
10-60 deg	12.19	12.19	12.19	12.19	12.19	12.19
70-120 deg	12.19	12.19	12.19	0.00	0.00	0.00
130-180 deg	0.00	0.00	0.00	12.19	12.19	12.19
190-240 deg	12.19	12.19	12.19	12.19	12.19	12.19
250-300 deg	12.19	12.19	12.19	0.00	0.00	0.00
310-360 deg	0.00	0.00	0.00	12.19	12.19	12.19
Widths [m] (10 to 360 deg)						
10-60 deg	453.63	473.76	479.49	470.66	447.52	410.79
70-120 deg	361.57	301.37	232.43	0.00	0.00	0.00

130-180 deg	0.00	0.00	0.00	465.63	454.86	430.26
190-240 deg	453.63	473.76	479.49	470.66	447.52	410.79
250-300 deg	361.57	301.37	232.43	0.00	0.00	0.00
310-360 deg	0.00	0.00	0.00	465.63	454.85	430.26
Lengths [m] (10 to 360 deg)						
10-60 deg	251.27	315.63	370.39	413.90	444.84	462.26
70-120 deg	465.63	454.86	430.26	0.00	0.00	0.00
130-180 deg	0.00	0.00	0.00	361.57	301.37	232.43
190-240 deg	251.27	315.63	370.39	413.90	444.84	462.26
250-300 deg	465.63	454.85	430.26	0.00	0.00	0.00
310-360 deg	0.00	0.00	0.00	361.57	301.37	232.43
Along Flow [m] (10 to 360 deg)						
10-60 deg	-271.48	-334.14	-386.65	-427.42	-455.19	-469.13
70-120 deg	-468.82	-454.27	-425.91	0.00	0.00	0.00
130-180 deg	0.00	0.00	0.00	-148.11	-77.45	-4.44
190-240 deg	20.21	18.52	16.26	13.51	10.35	6.88
250-300 deg	3.19	-0.59	-4.35	0.00	0.00	0.00
310-360 deg	0.00	0.00	0.00	-213.46	-223.92	-227.99
Across Flow [m] (10 to 360 deg)						
10-60 deg	188.41	160.11	126.94	89.92	50.16	8.88
70-120 deg	-32.67	-73.23	-111.78	0.00	0.00	0.00
130-180 deg	0.00	0.00	0.00	-236.01	-226.84	-210.78
190-240 deg	-188.41	-160.11	-126.94	-89.92	-50.16	-8.88
250-300 deg	32.67	73.23	111.78	0.00	0.00	0.00
310-360 deg	0.00	0.00	0.00	236.01	226.84	210.78

Source ID: EGEN4_3

Source Pathway

AERMOD

Lengths [m] (10 to 360 deg)						
10-60 deg	0.00	0.00	0.00	0.00	0.00	0.00
70-120 deg	0.00	454.86	430.26	453.63	473.76	479.49
130-180 deg	470.66	447.52	410.79	361.57	301.37	0.00
190-240 deg	0.00	0.00	0.00	0.00	0.00	0.00
250-300 deg	0.00	454.85	430.26	453.63	473.76	479.49
310-360 deg	470.66	447.52	410.79	361.57	301.37	0.00
Along Flow [m] (10 to 360 deg)						
10-60 deg	0.00	0.00	0.00	0.00	0.00	0.00
70-120 deg	0.00	-426.54	-438.31	-467.38	-487.30	-492.42
130-180 deg	-482.58	-458.07	-419.65	-368.47	-306.10	0.00
190-240 deg	0.00	0.00	0.00	0.00	0.00	0.00
250-300 deg	0.00	-28.31	8.05	13.74	13.54	12.93
310-360 deg	11.92	10.55	8.86	6.90	4.73	0.00
Across Flow [m] (10 to 360 deg)						
10-60 deg	0.00	0.00	0.00	0.00	0.00	0.00
70-120 deg	0.00	155.42	118.21	78.50	35.55	-8.48
130-180 deg	-52.25	-94.44	-133.75	-169.00	-199.11	0.00
190-240 deg	0.00	0.00	0.00	0.00	0.00	0.00
250-300 deg	0.00	-155.42	-118.21	-78.50	-35.55	8.48
310-360 deg	52.25	94.44	133.75	169.00	199.11	0.00

Emission Rate Units for Output

For Concentration

Unit Factor:	1E6
Emission Unit Label:	GRAMS/SEC
Concentration Unit Label:	MICROGRAMS/M**3

Source Pathway

AERMOD

Source Groups

Source Group ID: TRU4-SW	List of Sources in Group (Source Range or Single Sources)
	TRU_27 TRU_28 TRU_29 TRU_30 TRU_31 TRU_32

Source Group ID: TRU4-SE	List of Sources in Group (Source Range or Single Sources)
	TRU_33 TRU_34 TRU_35 TRU_36 TRU_37 TRU_38

Source Group ID: TRU4-NW	List of Sources in Group (Source Range or Single Sources)
	TRU_22 TRU_23 TRU_24 TRU_25 TRU_26

Source Group ID: TRU4-NE	List of Sources in Group (Source Range or Single Sources)
	TRU_16 TRU_17 TRU_18 TRU_19 TRU_20 TRU_21

Source Group ID: ONSITE	List of Sources in Group (Source Range or Single Sources)
	ONSITE

Source Group ID: OFFSITE2	List of Sources in Group (Source Range or Single Sources)
	OFFSITE2

Source Group ID: OFFSITE1	List of Sources in Group (Source Range or Single Sources)
	OFFSITE1

Source Group ID: EGEN4_3	List of Sources in Group (Source Range or Single Sources)
	EGEN4_3

Source Group ID: EGEN4_2	List of Sources in Group (Source Range or Single Sources)
	EGEN4_2

Source Group ID: EGEN4_1	List of Sources in Group (Source Range or Single Sources)
	EGEN4_1

Source Group ID: EGEN3	List of Sources in Group (Source Range or Single Sources)
	EGEN3

Source Group ID: EGEN2	List of Sources in Group (Source Range or Single Sources)
	EGEN2

Source Group ID: EGEN1	List of Sources in Group (Source Range or Single Sources)
	EGEN1

Source Group ID: Docks3	List of Sources in Group (Source Range or Single Sources)
	IDLEX_13
	IDLEX_14
	IDLEX_15

Source Group ID: Docks2	List of Sources in Group (Source Range or Single Sources)
	IDLEX_07
	IDLEX_08
	IDLEX_09
	IDLEX_10
	IDLEX_11
	IDLEX_12

Source Group ID: Docks1	List of Sources in Group (Source Range or Single Sources)
	IDLEX_01
	IDLEX_02
	IDLEX_03
	IDLEX_04
	IDLEX_05
	IDLEX_06

Source Group ID: Dock4-SW	List of Sources in Group (Source Range or Single Sources)
	IDLEX_27
	IDLEX_28
	IDLEX_29
	IDLEX_30
	IDLEX_31
	IDLEX_32

Source Group ID: Dock4-SE	List of Sources in Group (Source Range or Single Sources)
	IDLEX_33
	IDLEX_34
	IDLEX_35

	IDLEX_36
	IDLEX_37
	IDLEX_38

Source Group ID: Dock4-NW	List of Sources in Group (Source Range or Single Sources)
	IDLEX_22
	IDLEX_23
	IDLEX_24
	IDLEX_25
	IDLEX_26

Source Group ID: Dock4-NE	List of Sources in Group (Source Range or Single Sources)
	IDLEX_16
	IDLEX_17
	IDLEX_18
	IDLEX_19
	IDLEX_20
	IDLEX_21

Source Group ID: ALL	List of Sources in Group (Source Range or Single Sources)
	All Sources Included

Receptor Pathway

Receptor Networks

Note: Terrain Elavations and Flagpole Heights for Network Grids are in Page RE2 - 1 (If applicable)
Generated Discrete Receptors for Multi-Tier (Risk) Grid and Receptor Locations for Fenceline Grid are in Page RE3 - 1 (If applicable)

Discrete Receptors

Discrete Cartesian Receptors

Record Number	X-Coordinate [m]	Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations	Flagpole Heights [m] (Optional)
1	314050.00	3923150.00	UCART1	155.96	
2	314150.00	3923150.00	UCART1	157.61	
3	314250.00	3923150.00	UCART1	158.43	
4	314350.00	3923150.00	UCART1	159.63	
5	314450.00	3923150.00	UCART1	160.95	
6	314550.00	3923150.00	UCART1	162.53	
7	314650.00	3923150.00	UCART1	163.79	
8	314750.00	3923150.00	UCART1	164.79	
9	314850.00	3923150.00	UCART1	165.50	
10	314950.00	3923150.00	UCART1	167.40	
11	315050.00	3923150.00	UCART1	167.79	
12	313750.00	3923250.00	UCART1	153.72	
13	313850.00	3923250.00	UCART1	154.65	
14	313950.00	3923250.00	UCART1	156.28	
15	314050.00	3923250.00	UCART1	157.55	
16	314150.00	3923250.00	UCART1	158.92	
17	314250.00	3923250.00	UCART1	160.04	
18	314350.00	3923250.00	UCART1	161.26	
19	314450.00	3923250.00	UCART1	162.41	
20	314550.00	3923250.00	UCART1	163.67	
21	314650.00	3923250.00	UCART1	165.21	
22	314750.00	3923250.00	UCART1	166.57	
23	314850.00	3923250.00	UCART1	167.65	
24	314950.00	3923250.00	UCART1	169.09	
25	315050.00	3923250.00	UCART1	169.21	
26	315150.00	3923250.00	UCART1	169.07	
27	315250.00	3923250.00	UCART1	169.64	
28	313550.00	3923350.00	UCART1	152.12	
29	313650.00	3923350.00	UCART1	153.72	
30	313750.00	3923350.00	UCART1	155.04	

31	313850.00	3923350.00	UCART1	156.68
32	313950.00	3923350.00	UCART1	157.53
33	314050.00	3923350.00	UCART1	158.65
34	314150.00	3923350.00	UCART1	160.26
35	314250.00	3923350.00	UCART1	161.48
36	314350.00	3923350.00	UCART1	162.51
37	314450.00	3923350.00	UCART1	163.72
38	314550.00	3923350.00	UCART1	165.07
39	314650.00	3923350.00	UCART1	166.34
40	314750.00	3923350.00	UCART1	167.97
41	314850.00	3923350.00	UCART1	169.27
42	314950.00	3923350.00	UCART1	170.62
43	315050.00	3923350.00	UCART1	170.91
44	315150.00	3923350.00	UCART1	170.90
45	315250.00	3923350.00	UCART1	171.59
46	315350.00	3923350.00	UCART1	172.31
47	313550.00	3923450.00	UCART1	153.26
48	313650.00	3923450.00	UCART1	155.74
49	313750.00	3923450.00	UCART1	156.52
50	313850.00	3923450.00	UCART1	157.38
51	313950.00	3923450.00	UCART1	158.64
52	314050.00	3923450.00	UCART1	158.58
53	314150.00	3923450.00	UCART1	161.59
54	314250.00	3923450.00	UCART1	162.94
55	314350.00	3923450.00	UCART1	164.06
56	314450.00	3923450.00	UCART1	165.25
57	314550.00	3923450.00	UCART1	166.61
58	314650.00	3923450.00	UCART1	167.75
59	314750.00	3923450.00	UCART1	169.04
60	314850.00	3923450.00	UCART1	170.66
61	314950.00	3923450.00	UCART1	172.44
62	315050.00	3923450.00	UCART1	172.77
63	315150.00	3923450.00	UCART1	173.01
64	315250.00	3923450.00	UCART1	173.54
65	315350.00	3923450.00	UCART1	174.82
66	315450.00	3923450.00	UCART1	176.17
67	313450.00	3923550.00	UCART1	153.44
68	313550.00	3923550.00	UCART1	156.78

69	313650.00	3923550.00	UCART1	156.31
70	313750.00	3923550.00	UCART1	157.78
71	313850.00	3923550.00	UCART1	159.29
72	313950.00	3923550.00	UCART1	160.61
73	314050.00	3923550.00	UCART1	162.03
74	314150.00	3923550.00	UCART1	165.57
75	314250.00	3923550.00	UCART1	165.67
76	314350.00	3923550.00	UCART1	165.65
77	314450.00	3923550.00	UCART1	165.70
78	314550.00	3923550.00	UCART1	163.44
79	314650.00	3923550.00	UCART1	169.47
80	314750.00	3923550.00	UCART1	171.65
81	314850.00	3923550.00	UCART1	172.38
82	314950.00	3923550.00	UCART1	174.95
83	315050.00	3923550.00	UCART1	174.91
84	315150.00	3923550.00	UCART1	175.06
85	315250.00	3923550.00	UCART1	175.94
86	315350.00	3923550.00	UCART1	176.30
87	315450.00	3923550.00	UCART1	177.53
88	315550.00	3923550.00	UCART1	177.93
89	313450.00	3923650.00	UCART1	156.19
90	313550.00	3923650.00	UCART1	156.21
91	313650.00	3923650.00	UCART1	157.38
92	313750.00	3923650.00	UCART1	159.78
93	313850.00	3923650.00	UCART1	160.44
94	313950.00	3923650.00	UCART1	161.97
95	314050.00	3923650.00	UCART1	163.59
96	314150.00	3923650.00	UCART1	165.01
97	314250.00	3923650.00	UCART1	165.85
98	314350.00	3923650.00	UCART1	167.02
99	314450.00	3923650.00	UCART1	168.24
100	314550.00	3923650.00	UCART1	169.45
101	314650.00	3923650.00	UCART1	170.68
102	314750.00	3923650.00	UCART1	172.21
103	314850.00	3923650.00	UCART1	173.21
104	315250.00	3923650.00	UCART1	178.19
105	315350.00	3923650.00	UCART1	177.87
106	315450.00	3923650.00	UCART1	177.68

107	315550.00	3923650.00	UCART1	179.91
108	315650.00	3923650.00	UCART1	180.12
109	313450.00	3923750.00	UCART1	155.94
110	313550.00	3923750.00	UCART1	157.90
111	313650.00	3923750.00	UCART1	159.16
112	313750.00	3923750.00	UCART1	160.80
113	313850.00	3923750.00	UCART1	161.46
114	313950.00	3923750.00	UCART1	163.22
115	314050.00	3923750.00	UCART1	164.37
116	314150.00	3923750.00	UCART1	165.31
117	314250.00	3923750.00	UCART1	166.95
118	314350.00	3923750.00	UCART1	168.76
119	314450.00	3923750.00	UCART1	169.97
120	314550.00	3923750.00	UCART1	171.06
121	314650.00	3923750.00	UCART1	172.31
122	314750.00	3923750.00	UCART1	173.72
123	314850.00	3923750.00	UCART1	174.88
124	315350.00	3923750.00	UCART1	180.89
125	315450.00	3923750.00	UCART1	181.59
126	315550.00	3923750.00	UCART1	181.29
127	315650.00	3923750.00	UCART1	181.44
128	313450.00	3923850.00	UCART1	156.59
129	313550.00	3923850.00	UCART1	158.27
130	313650.00	3923850.00	UCART1	159.88
131	313750.00	3923850.00	UCART1	161.37
132	313850.00	3923850.00	UCART1	162.83
133	313950.00	3923850.00	UCART1	164.11
134	314050.00	3923850.00	UCART1	165.75
135	314150.00	3923850.00	UCART1	166.98
136	314250.00	3923850.00	UCART1	168.65
137	314350.00	3923850.00	UCART1	170.25
138	314450.00	3923850.00	UCART1	171.34
139	314550.00	3923850.00	UCART1	172.76
140	314650.00	3923850.00	UCART1	174.01
141	314750.00	3923850.00	UCART1	175.23
142	314850.00	3923850.00	UCART1	176.51
143	315350.00	3923850.00	UCART1	182.28
144	315450.00	3923850.00	UCART1	182.72

145	315550.00	3923850.00	UCART1	183.17
146	315650.00	3923850.00	UCART1	183.68
147	313450.00	3923950.00	UCART1	157.78
148	313550.00	3923950.00	UCART1	158.84
149	313650.00	3923950.00	UCART1	160.63
150	313750.00	3923950.00	UCART1	162.37
151	313850.00	3923950.00	UCART1	164.19
152	313950.00	3923950.00	UCART1	165.88
153	314050.00	3923950.00	UCART1	167.42
154	315050.00	3923950.00	UCART1	180.64
155	315150.00	3923950.00	UCART1	181.85
156	315250.00	3923950.00	UCART1	182.70
157	315350.00	3923950.00	UCART1	183.58
158	315450.00	3923950.00	UCART1	184.09
159	315550.00	3923950.00	UCART1	184.86
160	315650.00	3923950.00	UCART1	185.42
161	315750.00	3923950.00	UCART1	186.22
162	313450.00	3924050.00	UCART1	158.27
163	313550.00	3924050.00	UCART1	159.51
164	313650.00	3924050.00	UCART1	162.08
165	313750.00	3924050.00	UCART1	162.61
166	313850.00	3924050.00	UCART1	165.12
167	313950.00	3924050.00	UCART1	166.28
168	314050.00	3924050.00	UCART1	167.95
169	315050.00	3924050.00	UCART1	182.41
170	315150.00	3924050.00	UCART1	183.61
171	315250.00	3924050.00	UCART1	184.25
172	315350.00	3924050.00	UCART1	185.28
173	315450.00	3924050.00	UCART1	185.70
174	315550.00	3924050.00	UCART1	186.08
175	315650.00	3924050.00	UCART1	187.78
176	315750.00	3924050.00	UCART1	187.07
177	313450.00	3924150.00	UCART1	159.52
178	313550.00	3924150.00	UCART1	157.05
179	313650.00	3924150.00	UCART1	163.09
180	313750.00	3924150.00	UCART1	163.83
181	313850.00	3924150.00	UCART1	165.59
182	313950.00	3924150.00	UCART1	167.32

183	314050.00	3924150.00	UCART1	169.08
184	315050.00	3924150.00	UCART1	184.65
185	315150.00	3924150.00	UCART1	185.51
186	315250.00	3924150.00	UCART1	186.31
187	315350.00	3924150.00	UCART1	187.14
188	315450.00	3924150.00	UCART1	187.49
189	315550.00	3924150.00	UCART1	188.01
190	315650.00	3924150.00	UCART1	188.75
191	315750.00	3924150.00	UCART1	189.16
192	313450.00	3924250.00	UCART1	162.56
193	313550.00	3924250.00	UCART1	163.08
194	313650.00	3924250.00	UCART1	163.08
195	313750.00	3924250.00	UCART1	164.89
196	313850.00	3924250.00	UCART1	166.60
197	313950.00	3924250.00	UCART1	168.33
198	314050.00	3924250.00	UCART1	170.05
199	315050.00	3924250.00	UCART1	185.32
200	315150.00	3924250.00	UCART1	186.86
201	315250.00	3924250.00	UCART1	188.22
202	315350.00	3924250.00	UCART1	188.91
203	315450.00	3924250.00	UCART1	189.46
204	315550.00	3924250.00	SCHOOL	189.43
205	315650.00	3924250.00	SCHOOL	190.90
206	315750.00	3924250.00	UCART1	191.29
207	313450.00	3924350.00	UCART1	163.06
208	313550.00	3924350.00	UCART1	163.06
209	313650.00	3924350.00	UCART1	164.02
210	313750.00	3924350.00	UCART1	164.65
211	313850.00	3924350.00	UCART1	168.88
212	313950.00	3924350.00	UCART1	169.34
213	314050.00	3924350.00	UCART1	169.52
214	314150.00	3924350.00	UCART1	172.91
215	314250.00	3924350.00	UCART1	174.80
216	314350.00	3924350.00	UCART1	176.89
217	314450.00	3924350.00	UCART1	177.77
218	314550.00	3924350.00	UCART1	179.17
219	315050.00	3924350.00	UCART1	187.14
220	315150.00	3924350.00	UCART1	188.71

221	315250.00	3924350.00	UCART1	190.11
222	315350.00	3924350.00	UCART1	190.94
223	315450.00	3924350.00	UCART1	191.34
224	315550.00	3924350.00	UCART1	192.31
225	315650.00	3924350.00	UCART1	193.35
226	315750.00	3924350.00	UCART1	193.19
227	313450.00	3924450.00	UCART1	163.05
228	313550.00	3924450.00	UCART1	163.67
229	313650.00	3924450.00	UCART1	165.27
230	313750.00	3924450.00	UCART1	170.84
231	313850.00	3924450.00	UCART1	169.86
232	313950.00	3924450.00	UCART1	170.03
233	314050.00	3924450.00	UCART1	169.82
234	314150.00	3924450.00	UCART1	171.43
235	314250.00	3924450.00	UCART1	176.07
236	314350.00	3924450.00	UCART1	176.57
237	314450.00	3924450.00	UCART1	178.46
238	314550.00	3924450.00	UCART1	180.62
239	315050.00	3924450.00	UCART1	188.69
240	315150.00	3924450.00	UCART1	190.26
241	315250.00	3924450.00	UCART1	191.52
242	315350.00	3924450.00	UCART1	193.02
243	315450.00	3924450.00	UCART1	193.79
244	315550.00	3924450.00	UCART1	194.48
245	315650.00	3924450.00	UCART1	194.89
246	315750.00	3924450.00	UCART1	195.29
247	313450.00	3924550.00	UCART1	163.88
248	313550.00	3924550.00	UCART1	163.90
249	313650.00	3924550.00	UCART1	167.66
250	313750.00	3924550.00	UCART1	170.87
251	313850.00	3924550.00	UCART1	170.52
252	313950.00	3924550.00	UCART1	170.55
253	314050.00	3924550.00	UCART1	170.29
254	314150.00	3924550.00	UCART1	170.57
255	314250.00	3924550.00	UCART1	177.22
256	314350.00	3924550.00	UCART1	178.81
257	314450.00	3924550.00	UCART1	180.07
258	314550.00	3924550.00	UCART1	181.72

259	315050.00	3924550.00	UCART1	189.73
260	315150.00	3924550.00	UCART1	190.88
261	315250.00	3924550.00	UCART1	192.65
262	315350.00	3924550.00	UCART1	194.81
263	315450.00	3924550.00	UCART1	194.87
264	315550.00	3924550.00	UCART1	196.00
265	315650.00	3924550.00	UCART1	196.25
266	315750.00	3924550.00	UCART1	197.32
267	313450.00	3924650.00	UCART1	164.97
268	313550.00	3924650.00	UCART1	165.51
269	313650.00	3924650.00	UCART1	168.07
270	313750.00	3924650.00	UCART1	170.19
271	313850.00	3924650.00	UCART1	170.64
272	313950.00	3924650.00	UCART1	170.85
273	314050.00	3924650.00	UCART1	171.12
274	314150.00	3924650.00	UCART1	172.93
275	314250.00	3924650.00	UCART1	177.64
276	314350.00	3924650.00	UCART1	180.09
277	314450.00	3924650.00	UCART1	181.85
278	314550.00	3924650.00	UCART1	183.89
279	315050.00	3924650.00	UCART1	191.31
280	315150.00	3924650.00	UCART1	192.74
281	315250.00	3924650.00	UCART1	194.24
282	315350.00	3924650.00	UCART1	196.29
283	315450.00	3924650.00	UCART1	196.58
284	315550.00	3924650.00	UCART1	198.11
285	315650.00	3924650.00	UCART1	198.16
286	315750.00	3924650.00	UCART1	199.09
287	313550.00	3924750.00	UCART1	166.81
288	313650.00	3924750.00	UCART1	167.62
289	313750.00	3924750.00	UCART1	169.71
290	313850.00	3924750.00	UCART1	171.32
291	313950.00	3924750.00	UCART1	172.44
292	314050.00	3924750.00	UCART1	174.42
293	314150.00	3924750.00	UCART1	175.88
294	314250.00	3924750.00	UCART1	178.03
295	314350.00	3924750.00	UCART1	180.36
296	314450.00	3924750.00	UCART1	182.71

297	314550.00	3924750.00	UCART1	184.65
298	314650.00	3924750.00	UCART1	185.86
299	314750.00	3924750.00	UCART1	187.30
300	314850.00	3924750.00	UCART1	188.84
301	314950.00	3924750.00	UCART1	190.91
302	315050.00	3924750.00	UCART1	191.78
303	315150.00	3924750.00	UCART1	194.38
304	315250.00	3924750.00	UCART1	195.34
305	315350.00	3924750.00	UCART1	197.12
306	315450.00	3924750.00	UCART1	198.41
307	315550.00	3924750.00	UCART1	199.02
308	315650.00	3924750.00	UCART1	199.85
309	315750.00	3924750.00	UCART1	202.01
310	313650.00	3924850.00	UCART1	168.85
311	313750.00	3924850.00	UCART1	170.52
312	313850.00	3924850.00	UCART1	172.70
313	313950.00	3924850.00	UCART1	174.33
314	314050.00	3924850.00	UCART1	176.33
315	314150.00	3924850.00	UCART1	177.60
316	314250.00	3924850.00	UCART1	179.00
317	314350.00	3924850.00	UCART1	180.41
318	314450.00	3924850.00	UCART1	182.40
319	314550.00	3924850.00	UCART1	185.42
320	314650.00	3924850.00	UCART1	187.60
321	314750.00	3924850.00	UCART1	189.28
322	314850.00	3924850.00	UCART1	190.71
323	314950.00	3924850.00	UCART1	192.06
324	315050.00	3924850.00	UCART1	193.70
325	315150.00	3924850.00	UCART1	194.57
326	315250.00	3924850.00	UCART1	196.72
327	315350.00	3924850.00	UCART1	198.75
328	315450.00	3924850.00	UCART1	199.69
329	315550.00	3924850.00	UCART1	200.53
330	315650.00	3924850.00	UCART1	201.13
331	315750.00	3924850.00	UCART1	202.75
332	313750.00	3924950.00	UCART1	171.33
333	313850.00	3924950.00	UCART1	173.38
334	313950.00	3924950.00	UCART1	175.72

335	314050.00	3924950.00	UCART1	177.59
336	314150.00	3924950.00	UCART1	179.42
337	314250.00	3924950.00	UCART1	181.15
338	314350.00	3924950.00	UCART1	182.71
339	314450.00	3924950.00	UCART1	183.59
340	314550.00	3924950.00	UCART1	184.96
341	314650.00	3924950.00	UCART1	188.05
342	314750.00	3924950.00	UCART1	190.23
343	314850.00	3924950.00	UCART1	192.18
344	314950.00	3924950.00	UCART1	193.55
345	315050.00	3924950.00	UCART1	195.07
346	315150.00	3924950.00	UCART1	196.43
347	315250.00	3924950.00	UCART1	198.09
348	315350.00	3924950.00	UCART1	199.99
349	315450.00	3924950.00	UCART1	201.31
350	315550.00	3924950.00	UCART1	202.35
351	315650.00	3924950.00	UCART1	202.85
352	313950.00	3925050.00	UCART1	176.31
353	314050.00	3925050.00	UCART1	178.50
354	314150.00	3925050.00	UCART1	180.25
355	314250.00	3925050.00	UCART1	183.46
356	314350.00	3925050.00	UCART1	185.39
357	314450.00	3925050.00	UCART1	186.12
358	314550.00	3925050.00	UCART1	187.47
359	314650.00	3925050.00	UCART1	189.28
360	314750.00	3925050.00	UCART1	190.80
361	314850.00	3925050.00	UCART1	192.40
362	314950.00	3925050.00	UCART1	194.46
363	315050.00	3925050.00	UCART1	196.31
364	315150.00	3925050.00	UCART1	198.24
365	315250.00	3925050.00	UCART1	199.34
366	315350.00	3925050.00	UCART1	200.61
367	315450.00	3925050.00	UCART1	202.30
368	315550.00	3925050.00	UCART1	203.95
369	315650.00	3925050.00	UCART1	204.59
370	314050.00	3925150.00	UCART1	177.65
371	314150.00	3925150.00	UCART1	179.42
372	314250.00	3925150.00	UCART1	180.01

373	314350.00	3925150.00	UCART1	180.70
374	314450.00	3925150.00	UCART1	184.18
375	314550.00	3925150.00	UCART1	186.47
376	314650.00	3925150.00	UCART1	188.28
377	314750.00	3925150.00	UCART1	192.96
378	314850.00	3925150.00	UCART1	194.28
379	314950.00	3925150.00	UCART1	197.68
380	315050.00	3925150.00	UCART1	198.85
381	315150.00	3925150.00	UCART1	199.63
382	315250.00	3925150.00	UCART1	201.23
383	315350.00	3925150.00	UCART1	201.87
384	315450.00	3925150.00	UCART1	203.40
385	315550.00	3925150.00	UCART1	205.07
386	314150.00	3925250.00	UCART1	178.99
387	314250.00	3925250.00	UCART1	179.28
388	314350.00	3925250.00	UCART1	181.18
389	314450.00	3925250.00	UCART1	183.56
390	314550.00	3925250.00	UCART1	185.98
391	314650.00	3925250.00	UCART1	188.54
392	314750.00	3925250.00	UCART1	192.60
393	314850.00	3925250.00	UCART1	196.47
394	314950.00	3925250.00	UCART1	197.87
395	315050.00	3925250.00	UCART1	197.06
396	315150.00	3925250.00	UCART1	198.46
397	315250.00	3925250.00	UCART1	200.11
398	315350.00	3925250.00	UCART1	200.22
399	315450.00	3925250.00	UCART1	205.68
400	314250.00	3925350.00	UCART1	181.91
401	314350.00	3925350.00	UCART1	182.80
402	314450.00	3925350.00	UCART1	189.72
403	314550.00	3925350.00	UCART1	191.83
404	314650.00	3925350.00	UCART1	193.21
405	314750.00	3925350.00	UCART1	196.69
406	314850.00	3925350.00	UCART1	197.06
407	314950.00	3925350.00	UCART1	198.10
408	315050.00	3925350.00	UCART1	199.03
409	315150.00	3925350.00	UCART1	202.33
410	315250.00	3925350.00	UCART1	199.99

411	315350.00	3925350.00	UCART1	202.18
412	314450.00	3925450.00	UCART1	189.93
413	314550.00	3925450.00	UCART1	193.26
414	314650.00	3925450.00	UCART1	194.72
415	314750.00	3925450.00	UCART1	196.04
416	314850.00	3925450.00	UCART1	197.41
417	314950.00	3925450.00	UCART1	199.48
418	315050.00	3925450.00	UCART1	199.93
419	315150.00	3925450.00	UCART1	200.07
420	315250.00	3925450.00	UCART1	205.03
421	315086.66	3923842.45	RES	179.05
422	315086.66	3923817.48	RES	178.79
423	315108.06	3923838.88	RES	179.04
424	315105.69	3923815.10	RES	178.77
425	315174.65	3923919.74	RES	177.90
426	315215.08	3923917.37	RES	177.95
427	315257.89	3923917.37	RES	178.12
428	315295.42	3923916.38	RES	182.78
429	315167.52	3923847.21	RES	180.82
430	315190.11	3923847.21	RES	181.07
431	315221.96	3923844.99	RES	182.13
432	315163.95	3923824.61	RES	180.78
433	315192.49	3923826.99	RES	181.07
434	315245.27	3923843.64	RES	181.95
435	315163.66	3923805.89	RES	180.07
436	315190.11	3923807.97	RES	180.38
437	315222.06	3923825.65	RES	181.92
438	315188.92	3923786.56	RES	180.25
439	315242.53	3923823.73	RES	181.81
440	315162.47	3923784.18	RES	179.94
441	314958.81	3923770.76	RES	176.92
442	314987.58	3923770.09	RES	176.82
443	314962.16	3923753.36	RES	176.53
444	314988.24	3923749.35	RES	176.24
445	314959.48	3923729.95	RES	176.44
446	314988.24	3923729.95	RES	176.19
447	314958.14	3923713.90	RES	176.18
448	314986.24	3923711.89	RES	175.91

449	314958.14	3923690.49	RES	176.11
450	314984.90	3923689.15	RES	175.85
451	314958.81	3923672.43	RES	175.79
452	314986.91	3923673.77	RES	175.61
453	314959.48	3923651.69	RES	175.75
454	314983.56	3923651.02	RES	175.57
455	314959.48	3923632.96	RES	175.46
456	314984.23	3923631.62	RES	175.24
457	314960.92	3923609.80	RES	175.42
458	314983.56	3923610.22	RES	175.22
459	315048.45	3923768.08	RES	177.42
460	315074.53	3923766.74	RES	177.94
461	315099.28	3923765.40	RES	178.42
462	315049.11	3923749.35	RES	176.59
463	315073.19	3923747.34	RES	176.86
464	315096.61	3923746.01	RES	178.00
465	315044.43	3923727.28	RES	176.34
466	315070.44	3923725.94	RES	176.63
467	315097.27	3923724.60	RES	177.94
468	315045.77	3923709.89	RES	176.06
469	315072.53	3923709.89	RES	176.34
470	315097.94	3923709.89	RES	177.43
471	315045.10	3923686.47	RES	175.95
472	315071.19	3923687.14	RES	176.24
473	315095.94	3923685.81	RES	177.23
474	315044.43	3923669.08	RES	175.68
475	315071.19	3923669.08	RES	176.00
476	315102.63	3923667.75	RES	176.76
477	315043.76	3923646.34	RES	175.59
478	315071.19	3923647.01	RES	175.96
479	315098.61	3923647.01	RES	176.71
480	315043.09	3923628.28	RES	175.35
481	315069.18	3923628.28	RES	175.63
482	315102.63	3923626.94	RES	176.02
483	315041.91	3923607.79	RES	175.34
484	315067.84	3923608.21	RES	175.60
485	315100.62	3923606.88	RES	176.02
486	315161.49	3923766.07	RES	179.22

487	315183.56	3923767.41	RES	179.49
488	315159.90	3923743.83	RES	179.08
489	315186.24	3923745.34	RES	179.42
490	315158.99	3923725.34	RES	178.45
491	315184.90	3923727.95	RES	178.75
492	315160.15	3923706.54	RES	178.38
493	315180.89	3923707.21	RES	178.63
494	315160.15	3923690.49	RES	177.85
495	315187.58	3923685.14	RES	178.00
496	315158.81	3923668.41	RES	177.73
497	315188.25	3923667.08	RES	178.02
498	315157.48	3923649.68	RES	177.02
499	315223.03	3923805.54	RES	181.50
500	315246.44	3923804.87	RES	181.25
501	315225.03	3923786.81	RES	181.15
502	315247.11	3923787.48	RES	180.95
503	315224.37	3923770.76	RES	180.55
504	315246.44	3923770.09	RES	180.27
505	315223.03	3923752.03	RES	180.16
506	315245.77	3923752.03	RES	179.89
507	315225.03	3923734.63	RES	179.88
508	315244.43	3923734.63	RES	179.66
509	315223.03	3923712.56	RES	179.69
510	315243.09	3923713.90	RES	179.52
511	315220.35	3923696.51	RES	179.40
512	315326.99	3923924.33	RES	183.73
513	315320.46	3923947.21	RES	183.77
514	315329.17	3923971.17	RES	184.11
515	315323.73	3923987.51	RES	184.36
516	315328.08	3924010.39	RES	184.77
517	315326.99	3924030.00	RES	185.06
518	315333.53	3924045.25	RES	185.37
519	315332.44	3924059.41	RES	185.60
520	315332.44	3924082.29	RES	186.00
521	315332.44	3924097.54	RES	186.31
522	315333.53	3924123.68	RES	186.75
523	315334.62	3924134.58	RES	186.97
524	315336.80	3924159.63	RES	187.42

525	315335.71	3924169.44	RES	187.61
526	315334.62	3924193.40	RES	187.99
527	315332.44	3924216.28	RES	188.42
528	315336.80	3924229.35	RES	188.63
529	315338.98	3924244.60	RES	188.89
530	315337.89	3924236.98	RES	188.75
531	315335.71	3924251.14	RES	189.01
532	315337.89	3924269.66	RES	189.33
533	315337.89	3924291.44	RES	189.70
534	315345.51	3924327.39	RES	190.41
535	315340.07	3924343.73	RES	190.90
536	315340.07	3924368.79	RES	191.37
537	315343.34	3924385.13	RES	191.60
538	315344.42	3924408.01	RES	192.14
539	315345.51	3924424.35	RES	192.46
540	315345.51	3924465.74	RES	193.40
541	315348.78	3924478.81	RES	193.65
542	315352.05	3924502.78	RES	194.06
543	315349.87	3924518.03	RES	194.31
544	315355.32	3924539.82	RES	194.62
545	315356.41	3924577.95	RES	195.27
546	314074.41	3923738.41	NON-RES	164.65
547	314152.46	3923718.89	NON-RES	165.53
548	314280.18	3923708.25	NON-RES	166.95
549	314624.33	3923582.30	NON-RES	169.72
550	314388.39	3923589.40	NON-RES	165.79
551	314278.41	3923589.40	NON-RES	165.70
552	314193.26	3923587.62	NON-RES	165.68

Plant Boundary Receptors

Receptor Groups

Record Number	Group ID	Group Description
1	UCART1	Receptors generated from Uniform Cartesian Grid
2	SCHOOL	
3	RES	
4	NON-RES	

Meteorology Pathway

AERMOD

Met Input Data

Surface Met Data

Filename: Bakersfield_18-22.SFC
Format Type: Default AERMET format

Profile Met Data

Filename: Bakersfield_18-22.PFL
Format Type: Default AERMET format

Wind Speed

☐ Wind Speeds are Vector Mean (Not Scalar Means)

Wind Direction

Rotation Adjustment [deg]:

Potential Temperature Profile

Base Elevation above MSL (for Primary Met Tower): 149.00 [m]

Meteorological Station Data

Stations	Station No.	Year	X Coordinate [m]	Y Coordinate [m]	Station Name
Surface Upper Air		2018 2018			OAKLAND/WSO AP

Data Period

Data Period to Process

Start Date: 1/1/2018 Start Hour: 1 End Date: 12/31/2022 End Hour: 24

Wind Speed Categories

Stability Category	Wind Speed [m/s]	Stability Category	Wind Speed [m/s]
A	1.54	D	8.23
B	3.09	E	10.8
C	5.14	F	No Upper Bound

Output Pathway

1	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐		No

Contour Plot Files (PLOTFILE)

Path for PLOTFILES: OPHRA.AD

Averaging Period	Source Group ID	High Value	File Name
Period	Docks1		DOCK1_PE.PLT
1	Docks1	1st	DOCK1_01.PLT
1	Docks2	1st	DOCK2_01.PLT
Period	Docks2		DOCK2_PE.PLT
Period	Docks3		DOCK3_PE.PLT
1	Docks3	1st	DOCK3_01.PLT
1	Dock4-NE	1st	DOCK4NE_01.PLT
Period	Dock4-NE		DOCK4NE_PE.PLT
Period	Dock4-NW		DOCK4NW_PE.PLT
1	Dock4-NW	1st	DOCK4NW_01.PLT
1	Dock4-SW	1st	DOCK4SW_01.PLT
Period	Dock4-SW		DOCK4SW_PE.PLT
Period	Dock4-SE		DOCK4SE_PE.PLT
1	Dock4-SE	1st	DOCK4SE_01.PLT
Period	ONSITE		ONSITE_PE.PLT
1	ONSITE	1st	ONSITE_01.PLT
1	OFFSITE1	1st	OFFSITE1_01.PLT
1	OFFSITE2	1st	OFFSITE2_01.PLT
Period	OFFSITE2		OFFSITE2_PE.PLT
Period	OFFSITE1		OFFSITE1_PE.PLT
Period	TRU4-NE		TRU4NE_PE.PLT
1	TRU4-NE	1st	TRU4NE_01.PLT
1	TRU4-NW	1st	TRU4NW_01.PLT
1	TRU4-SW	1st	TRU4SW_01.PLT
1	TRU4-SE	1st	TRU4SE_01.PLT
Period	TRU4-SE		TRU4SE_PE.PLT
Period	TRU4-SW		TRU4SW_PE.PLT
Period	TRU4-NW		TRU4NW_PE.PLT
Period	EGEN1		EGEN1_PE.PLT
Period	EGEN2		EGEN2_PE.PLT
Period	EGEN3		EGEN3_PE.PLT
Period	EGEN4_1		EGEN4_1_PE.PLT
Period	EGEN4_2		EGEN4_2_PE.PLT
Period	EGEN4_3		EGEN4_3_PE.PLT

Output Pathway

1	EGEN1	1st	EGEN1_01.PLT
1	EGEN2	1st	EGEN2_01.PLT
1	EGEN3	1st	EGEN3_01.PLT
1	EGEN4_1	1st	EGEN4_1_01.PLT
1	EGEN4_2	1st	EGEN4_2_01.PLT
1	EGEN4_3	1st	EGEN4_3_01.PLT

HARP Project Summary Report 4/17/2025 9:28:22 AM

PROJECT INFORMATION
HARP Version: 22118
Project Name: HARPCON
Project Output Directory: F:\Jobs\59010001\ConHRA\HARPCON
HARP Database: NA

FACILITY INFORMATION
Origin
X (m):0
Y (m):0
Zone:1
No. of Sources:0
No. of Buildings:0

EMISSION INVENTORY
No. of Pollutants:2
No. of Background Pollutants:0

Emissions

ScrID	StkID	ProID	PolID	PolAbbrev	Multi	Annual Ems (lbs/yr)	MaxHr Ems (lbs/hr)	MWAF
SITE	0	0	9901	DieselExhPM	1	344.5	0	1
ROAD	0	0	9901	DieselExhPM	1	1.9	0	1

Background

PolID	PolAbbrev	Conc (ug/m^3)	MWAF

Ground level concentration files (\glc\)

9901MAXHR.txt
9901PER.txt

POLLUTANT HEALTH INFORMATION
Health Database: C:\HARP2\Tables\HEALTH17320.mdb
Health Table Version: HEALTH23279
Official: True

PolID	PolAbbrev	InhCancer	OralCancer	AcuteREL	InhChronicREL	OralChronicREL	InhChronic8HRREL
9901	DieselExhPM	1.1			5		

HARP2 - HRACalc (dated 22118) 4/16/2025 2:50:10 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: Cancer
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 2.15

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 2
2<9 Years Bin: 0.1500001
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: F:\Jobs\59010001\ConHRA\HARPCON\hra\ResCancer2.4YrCancerRisk.csv
Cancer risk total by receptor saved to: F:\Jobs\59010001\ConHRA\HARPCON\hra\ResCancer2.4YrCancerRiskSumByRec.csv
HRA ran successfully

Health Risk Summary - Construction (Summary of HARP2 Results)

Airport Commerce Industrial Project

	RISK_SUM	Cancer Risk/million	MAXHI Non	MAXHI Acute
Maximum Risk	5.46E-06	5.46	0.003139	0

Maximally Exposed Individual Receptor

	X	Y
MEIR UTM	315086.7	3923842

Receptor # 421

*HARP - HRACalc v22118 4/16/2025 2:50:10 PM - Cancer Risk - Input File: F:\Jobs\59010001\ConHRA\HARPCON\hra\ResCancer2.4YrHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
421	ALL	RES	315086.7	3923842	0.015695	9901	DieselExhPM	5.46E-06	2.15YrCancerDe	*	5.46E-06
441	ALL	RES	314958.8	3923771	0.015571	9901	DieselExhPM	5.42E-06	2.15YrCancerDe	*	5.42E-06
442	ALL	RES	314987.6	3923770	0.014949	9901	DieselExhPM	5.20E-06	2.15YrCancerDe	*	5.20E-06
423	ALL	RES	315108.1	3923839	0.014665	9901	DieselExhPM	5.10E-06	2.15YrCancerDe	*	5.10E-06
422	ALL	RES	315086.7	3923817	0.014648	9901	DieselExhPM	5.10E-06	2.15YrCancerDe	*	5.10E-06
443	ALL	RES	314962.2	3923753	0.014422	9901	DieselExhPM	5.02E-06	2.15YrCancerDe	*	5.02E-06
424	ALL	RES	315105.7	3923815	0.013904	9901	DieselExhPM	4.84E-06	2.15YrCancerDe	*	4.84E-06
444	ALL	RES	314988.2	3923749	0.01378	9901	DieselExhPM	4.79E-06	2.15YrCancerDe	*	4.79E-06
425	ALL	RES	315174.7	3923920	0.013592	9901	DieselExhPM	4.73E-06	2.15YrCancerDe	*	4.73E-06
459	ALL	RES	315048.5	3923768	0.013575	9901	DieselExhPM	4.72E-06	2.15YrCancerDe	*	4.72E-06
445	ALL	RES	314959.5	3923730	0.013153	9901	DieselExhPM	4.58E-06	2.15YrCancerDe	*	4.58E-06
460	ALL	RES	315074.5	3923767	0.012952	9901	DieselExhPM	4.51E-06	2.15YrCancerDe	*	4.51E-06
446	ALL	RES	314988.2	3923730	0.012817	9901	DieselExhPM	4.46E-06	2.15YrCancerDe	*	4.46E-06
462	ALL	RES	315049.1	3923749	0.012742	9901	DieselExhPM	4.43E-06	2.15YrCancerDe	*	4.43E-06
429	ALL	RES	315167.5	3923847	0.012568	9901	DieselExhPM	4.37E-06	2.15YrCancerDe	*	4.37E-06
461	ALL	RES	315099.3	3923765	0.012351	9901	DieselExhPM	4.30E-06	2.15YrCancerDe	*	4.30E-06
447	ALL	RES	314958.1	3923714	0.012338	9901	DieselExhPM	4.29E-06	2.15YrCancerDe	*	4.29E-06
463	ALL	RES	315073.2	3923747	0.012221	9901	DieselExhPM	4.25E-06	2.15YrCancerDe	*	4.25E-06
432	ALL	RES	315164	3923825	0.012205	9901	DieselExhPM	4.25E-06	2.15YrCancerDe	*	4.25E-06
448	ALL	RES	314986.2	3923712	0.011995	9901	DieselExhPM	4.17E-06	2.15YrCancerDe	*	4.17E-06
465	ALL	RES	315044.4	3923727	0.011943	9901	DieselExhPM	4.16E-06	2.15YrCancerDe	*	4.16E-06
426	ALL	RES	315215.1	3923917	0.011877	9901	DieselExhPM	4.13E-06	2.15YrCancerDe	*	4.13E-06
435	ALL	RES	315163.7	3923806	0.011831	9901	DieselExhPM	4.12E-06	2.15YrCancerDe	*	4.12E-06
430	ALL	RES	315190.1	3923847	0.011767	9901	DieselExhPM	4.09E-06	2.15YrCancerDe	*	4.09E-06
464	ALL	RES	315096.6	3923746	0.011758	9901	DieselExhPM	4.09E-06	2.15YrCancerDe	*	4.09E-06
466	ALL	RES	315070.4	3923726	0.011507	9901	DieselExhPM	4.00E-06	2.15YrCancerDe	*	4.00E-06
440	ALL	RES	315162.5	3923784	0.011358	9901	DieselExhPM	3.95E-06	2.15YrCancerDe	*	3.95E-06
433	ALL	RES	315192.5	3923827	0.011341	9901	DieselExhPM	3.95E-06	2.15YrCancerDe	*	3.95E-06
468	ALL	RES	315045.8	3923710	0.01127	9901	DieselExhPM	3.92E-06	2.15YrCancerDe	*	3.92E-06
449	ALL	RES	314958.1	3923690	0.01126	9901	DieselExhPM	3.92E-06	2.15YrCancerDe	*	3.92E-06
436	ALL	RES	315190.1	3923808	0.011116	9901	DieselExhPM	3.87E-06	2.15YrCancerDe	*	3.87E-06
467	ALL	RES	315097.3	3923725	0.011071	9901	DieselExhPM	3.85E-06	2.15YrCancerDe	*	3.85E-06
450	ALL	RES	314984.9	3923689	0.011044	9901	DieselExhPM	3.84E-06	2.15YrCancerDe	*	3.84E-06
486	ALL	RES	315161.5	3923766	0.010952	9901	DieselExhPM	3.81E-06	2.15YrCancerDe	*	3.81E-06
469	ALL	RES	315072.5	3923710	0.010932	9901	DieselExhPM	3.80E-06	2.15YrCancerDe	*	3.80E-06
438	ALL	RES	315188.9	3923787	0.010743	9901	DieselExhPM	3.74E-06	2.15YrCancerDe	*	3.74E-06
431	ALL	RES	315222	3923845	0.010661	9901	DieselExhPM	3.71E-06	2.15YrCancerDe	*	3.71E-06
470	ALL	RES	315097.9	3923710	0.010607	9901	DieselExhPM	3.69E-06	2.15YrCancerDe	*	3.69E-06
451	ALL	RES	314958.8	3923672	0.010495	9901	DieselExhPM	3.65E-06	2.15YrCancerDe	*	3.65E-06
487	ALL	RES	315183.6	3923767	0.010485	9901	DieselExhPM	3.65E-06	2.15YrCancerDe	*	3.65E-06
471	ALL	RES	315045.1	3923686	0.010467	9901	DieselExhPM	3.64E-06	2.15YrCancerDe	*	3.64E-06
488	ALL	RES	315159.9	3923744	0.010463	9901	DieselExhPM	3.64E-06	2.15YrCancerDe	*	3.64E-06
452	ALL	RES	314986.9	3923674	0.010428	9901	DieselExhPM	3.63E-06	2.15YrCancerDe	*	3.63E-06
427	ALL	RES	315257.9	3923917	0.010415	9901	DieselExhPM	3.62E-06	2.15YrCancerDe	*	3.62E-06
437	ALL	RES	315222.1	3923826	0.010413	9901	DieselExhPM	3.62E-06	2.15YrCancerDe	*	3.62E-06
472	ALL	RES	315071.2	3923687	0.010232	9901	DieselExhPM	3.56E-06	2.15YrCancerDe	*	3.56E-06

499	ALL	RES	315223	3923806	0.01013	9901	DieselExhPM	3.52E-06	2.15YrCancerDe	*	3.52E-06
490	ALL	RES	315159	3923725	0.010046	9901	DieselExhPM	3.50E-06	2.15YrCancerDe	*	3.50E-06
434	ALL	RES	315245.3	3923844	0.010008	9901	DieselExhPM	3.48E-06	2.15YrCancerDe	*	3.48E-06
489	ALL	RES	315186.2	3923745	0.00998	9901	DieselExhPM	3.47E-06	2.15YrCancerDe	*	3.47E-06
473	ALL	RES	315095.9	3923686	0.009942	9901	DieselExhPM	3.46E-06	2.15YrCancerDe	*	3.46E-06
474	ALL	RES	315044.4	3923669	0.009903	9901	DieselExhPM	3.45E-06	2.15YrCancerDe	*	3.45E-06
439	ALL	RES	315242.5	3923824	0.009861	9901	DieselExhPM	3.43E-06	2.15YrCancerDe	*	3.43E-06
501	ALL	RES	315225	3923787	0.009828	9901	DieselExhPM	3.42E-06	2.15YrCancerDe	*	3.42E-06
453	ALL	RES	314959.5	3923652	0.009713	9901	DieselExhPM	3.38E-06	2.15YrCancerDe	*	3.38E-06
475	ALL	RES	315071.2	3923669	0.00969	9901	DieselExhPM	3.37E-06	2.15YrCancerDe	*	3.37E-06
491	ALL	RES	315184.9	3923728	0.009651	9901	DieselExhPM	3.36E-06	2.15YrCancerDe	*	3.36E-06
503	ALL	RES	315224.4	3923771	0.009634	9901	DieselExhPM	3.35E-06	2.15YrCancerDe	*	3.35E-06
454	ALL	RES	314983.6	3923651	0.009629	9901	DieselExhPM	3.35E-06	2.15YrCancerDe	*	3.35E-06
492	ALL	RES	315160.2	3923707	0.009603	9901	DieselExhPM	3.34E-06	2.15YrCancerDe	*	3.34E-06
500	ALL	RES	315246.4	3923805	0.009572	9901	DieselExhPM	3.33E-06	2.15YrCancerDe	*	3.33E-06
505	ALL	RES	315223	3923752	0.009381	9901	DieselExhPM	3.26E-06	2.15YrCancerDe	*	3.26E-06
476	ALL	RES	315102.6	3923668	0.009375	9901	DieselExhPM	3.26E-06	2.15YrCancerDe	*	3.26E-06
502	ALL	RES	315247.1	3923787	0.009356	9901	DieselExhPM	3.26E-06	2.15YrCancerDe	*	3.26E-06
493	ALL	RES	315180.9	3923707	0.0093	9901	DieselExhPM	3.24E-06	2.15YrCancerDe	*	3.24E-06
494	ALL	RES	315160.2	3923690	0.009245	9901	DieselExhPM	3.22E-06	2.15YrCancerDe	*	3.22E-06
477	ALL	RES	315043.8	3923646	0.009222	9901	DieselExhPM	3.21E-06	2.15YrCancerDe	*	3.21E-06
428	ALL	RES	315295.4	3923916	0.009185	9901	DieselExhPM	3.20E-06	2.15YrCancerDe	*	3.20E-06
504	ALL	RES	315246.4	3923770	0.00918	9901	DieselExhPM	3.19E-06	2.15YrCancerDe	*	3.19E-06
478	ALL	RES	315071.2	3923647	0.009077	9901	DieselExhPM	3.16E-06	2.15YrCancerDe	*	3.16E-06
507	ALL	RES	315225	3923735	0.009065	9901	DieselExhPM	3.15E-06	2.15YrCancerDe	*	3.15E-06
455	ALL	RES	314959.5	3923633	0.009061	9901	DieselExhPM	3.15E-06	2.15YrCancerDe	*	3.15E-06
456	ALL	RES	314984.2	3923632	0.008984	9901	DieselExhPM	3.13E-06	2.15YrCancerDe	*	3.13E-06
506	ALL	RES	315245.8	3923752	0.008946	9901	DieselExhPM	3.11E-06	2.15YrCancerDe	*	3.11E-06
479	ALL	RES	315098.6	3923647	0.008888	9901	DieselExhPM	3.09E-06	2.15YrCancerDe	*	3.09E-06
496	ALL	RES	315158.8	3923668	0.008794	9901	DieselExhPM	3.06E-06	2.15YrCancerDe	*	3.06E-06
495	ALL	RES	315187.6	3923685	0.008767	9901	DieselExhPM	3.05E-06	2.15YrCancerDe	*	3.05E-06
509	ALL	RES	315223	3923713	0.008743	9901	DieselExhPM	3.04E-06	2.15YrCancerDe	*	3.04E-06
508	ALL	RES	315244.4	3923735	0.008724	9901	DieselExhPM	3.04E-06	2.15YrCancerDe	*	3.04E-06
480	ALL	RES	315043.1	3923628	0.008712	9901	DieselExhPM	3.03E-06	2.15YrCancerDe	*	3.03E-06
513	ALL	RES	315320.5	3923947	0.008616	9901	DieselExhPM	3.00E-06	2.15YrCancerDe	*	3.00E-06
481	ALL	RES	315069.2	3923628	0.008591	9901	DieselExhPM	2.99E-06	2.15YrCancerDe	*	2.99E-06
515	ALL	RES	315323.7	3923988	0.008588	9901	DieselExhPM	2.99E-06	2.15YrCancerDe	*	2.99E-06
511	ALL	RES	315220.4	3923697	0.008522	9901	DieselExhPM	2.97E-06	2.15YrCancerDe	*	2.97E-06
516	ALL	RES	315328.1	3924010	0.008475	9901	DieselExhPM	2.95E-06	2.15YrCancerDe	*	2.95E-06
510	ALL	RES	315243.1	3923714	0.008447	9901	DieselExhPM	2.94E-06	2.15YrCancerDe	*	2.94E-06
514	ALL	RES	315329.2	3923971	0.008443	9901	DieselExhPM	2.94E-06	2.15YrCancerDe	*	2.94E-06
497	ALL	RES	315188.3	3923667	0.008423	9901	DieselExhPM	2.93E-06	2.15YrCancerDe	*	2.93E-06
517	ALL	RES	315327	3924030	0.008414	9901	DieselExhPM	2.93E-06	2.15YrCancerDe	*	2.93E-06
498	ALL	RES	315157.5	3923650	0.008412	9901	DieselExhPM	2.93E-06	2.15YrCancerDe	*	2.93E-06
512	ALL	RES	315327	3923924	0.008389	9901	DieselExhPM	2.92E-06	2.15YrCancerDe	*	2.92E-06
482	ALL	RES	315102.6	3923627	0.008363	9901	DieselExhPM	2.91E-06	2.15YrCancerDe	*	2.91E-06
458	ALL	RES	314983.6	3923610	0.008347	9901	DieselExhPM	2.90E-06	2.15YrCancerDe	*	2.90E-06
457	ALL	RES	314960.9	3923610	0.008343	9901	DieselExhPM	2.90E-06	2.15YrCancerDe	*	2.90E-06
518	ALL	RES	315333.5	3924045	0.008212	9901	DieselExhPM	2.86E-06	2.15YrCancerDe	*	2.86E-06
519	ALL	RES	315332.4	3924059	0.008197	9901	DieselExhPM	2.85E-06	2.15YrCancerDe	*	2.85E-06
483	ALL	RES	315041.9	3923608	0.008179	9901	DieselExhPM	2.85E-06	2.15YrCancerDe	*	2.85E-06
520	ALL	RES	315332.4	3924082	0.008107	9901	DieselExhPM	2.82E-06	2.15YrCancerDe	*	2.82E-06
484	ALL	RES	315067.8	3923608	0.008103	9901	DieselExhPM	2.82E-06	2.15YrCancerDe	*	2.82E-06
521	ALL	RES	315332.4	3924098	0.008031	9901	DieselExhPM	2.79E-06	2.15YrCancerDe	*	2.79E-06
485	ALL	RES	315100.6	3923607	0.007926	9901	DieselExhPM	2.76E-06	2.15YrCancerDe	*	2.76E-06
522	ALL	RES	315333.5	3924124	0.007863	9901	DieselExhPM	2.74E-06	2.15YrCancerDe	*	2.74E-06
523	ALL	RES	315334.6	3924135	0.007767	9901	DieselExhPM	2.70E-06	2.15YrCancerDe	*	2.70E-06
524	ALL	RES	315336.8	3924160	0.00755	9901	DieselExhPM	2.63E-06	2.15YrCancerDe	*	2.63E-06
525	ALL	RES	315335.7	3924169	0.007507	9901	DieselExhPM	2.61E-06	2.15YrCancerDe	*	2.61E-06
526	ALL	RES	315334.6	3924193	0.007361	9901	DieselExhPM	2.56E-06	2.15YrCancerDe	*	2.56E-06
527	ALL	RES	315332.4	3924216	0.007228	9901	DieselExhPM	2.51E-06	2.15YrCancerDe	*	2.51E-06
528	ALL	RES	315336.8	3924229	0.007016	9901	DieselExhPM	2.44E-06	2.15YrCancerDe	*	2.44E-06

530	ALL	RES	315337.9	3924237	0.006926	9901	DieselExhPM	2.41E-06	2.15YrCancerDe	*	2.41E-06
531	ALL	RES	315335.7	3924251	0.006847	9901	DieselExhPM	2.38E-06	2.15YrCancerDe	*	2.38E-06
529	ALL	RES	315339	3924245	0.006832	9901	DieselExhPM	2.38E-06	2.15YrCancerDe	*	2.38E-06
532	ALL	RES	315337.9	3924270	0.006623	9901	DieselExhPM	2.30E-06	2.15YrCancerDe	*	2.30E-06
533	ALL	RES	315337.9	3924291	0.006406	9901	DieselExhPM	2.23E-06	2.15YrCancerDe	*	2.23E-06
534	ALL	RES	315345.5	3924327	0.00586	9901	DieselExhPM	2.04E-06	2.15YrCancerDe	*	2.04E-06
535	ALL	RES	315340.1	3924344	0.00577	9901	DieselExhPM	2.01E-06	2.15YrCancerDe	*	2.01E-06
536	ALL	RES	315340.1	3924369	0.005483	9901	DieselExhPM	1.91E-06	2.15YrCancerDe	*	1.91E-06
537	ALL	RES	315343.3	3924385	0.005241	9901	DieselExhPM	1.82E-06	2.15YrCancerDe	*	1.82E-06
538	ALL	RES	315344.4	3924408	0.004951	9901	DieselExhPM	1.72E-06	2.15YrCancerDe	*	1.72E-06
539	ALL	RES	315345.5	3924424	0.004746	9901	DieselExhPM	1.65E-06	2.15YrCancerDe	*	1.65E-06
540	ALL	RES	315345.5	3924466	0.004272	9901	DieselExhPM	1.49E-06	2.15YrCancerDe	*	1.49E-06
541	ALL	RES	315348.8	3924479	0.00409	9901	DieselExhPM	1.42E-06	2.15YrCancerDe	*	1.42E-06
542	ALL	RES	315352.1	3924503	0.003807	9901	DieselExhPM	1.32E-06	2.15YrCancerDe	*	1.32E-06
543	ALL	RES	315349.9	3924518	0.003682	9901	DieselExhPM	1.28E-06	2.15YrCancerDe	*	1.28E-06
544	ALL	RES	315355.3	3924540	0.003426	9901	DieselExhPM	1.19E-06	2.15YrCancerDe	*	1.19E-06
545	ALL	RES	315356.4	3924578	0.003085	9901	DieselExhPM	1.07E-06	2.15YrCancerDe	*	1.07E-06

HARP2 - HRACalc (dated 22118) 4/16/2025 3:00:00 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Worker
Scenario: Cancer
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 16
Total Exposure Duration: 2.4

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 2.4
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: False
Dermal: False
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: Moderate8HR

Worker Adjustment Factors
NOTE: The worker adjustment factors below are only used for cancer assessments. However, the GLC adjustment factor is also applied to 8-hr noncancer chronic assessments.
Worker adjustments factors enabled: YES
GLC adjustment factor: 4.2
Exposure frequency: 250

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: F:\Jobs\59010001\ConHRA\HARPCON\hra\WkrCancer2.4YrCancerRisk.csv
Cancer risk total by receptor saved to: F:\Jobs\59010001\ConHRA\HARPCON\hra\WkrCancer2.4YrCancerRiskSumByRec.csv
HRA ran successfully

Health Risk Summary - Construction (Summary of HARP2 Results)

Airport Commerce Industrial Project

	RISK_SUM	Cancer Risk/million	MAXHI NonCancer Chronic	MAXHI Acute
Maximum Risk	7.28E-07	0.73	0.00559	0

Maximally Exposed Individual Worker Receptor

	X	Y
MEIW UTM	314750	3923850

Receptor # 141

*HARP - HRACalc v22118 4/16/2025 3:00:00 PM - Cancer Risk - Input File: F:\Jobs\59010001\ConHRA\HARPCON\hra\WkrCancer2.4YrHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
141	ALL	UCART1	314750	3923850	0.027948	9901	DieselExhPM	7.28E-07	2.4YrCancerDerived_Inh	*	7.28E-07
142	ALL	UCART1	314850	3923850	0.027931	9901	DieselExhPM	7.27E-07	2.4YrCancerDerived_Inh	*	7.27E-07
184	ALL	UCART1	315050	3924150	0.026272	9901	DieselExhPM	6.84E-07	2.4YrCancerDerived_Inh	*	6.84E-07
169	ALL	UCART1	315050	3924050	0.026195	9901	DieselExhPM	6.82E-07	2.4YrCancerDerived_Inh	*	6.82E-07
140	ALL	UCART1	314650	3923850	0.025946	9901	DieselExhPM	6.76E-07	2.4YrCancerDerived_Inh	*	6.76E-07
199	ALL	UCART1	315050	3924250	0.025538	9901	DieselExhPM	6.65E-07	2.4YrCancerDerived_Inh	*	6.65E-07
154	ALL	UCART1	315050	3923950	0.023648	9901	DieselExhPM	6.16E-07	2.4YrCancerDerived_Inh	*	6.16E-07
219	ALL	UCART1	315050	3924350	0.023647	9901	DieselExhPM	6.16E-07	2.4YrCancerDerived_Inh	*	6.16E-07
139	ALL	UCART1	314550	3923850	0.023216	9901	DieselExhPM	6.05E-07	2.4YrCancerDerived_Inh	*	6.05E-07
215	ALL	UCART1	314250	3924350	0.022577	9901	DieselExhPM	5.88E-07	2.4YrCancerDerived_Inh	*	5.88E-07
239	ALL	UCART1	315050	3924450	0.020675	9901	DieselExhPM	5.38E-07	2.4YrCancerDerived_Inh	*	5.38E-07
138	ALL	UCART1	314450	3923850	0.019525	9901	DieselExhPM	5.08E-07	2.4YrCancerDerived_Inh	*	5.08E-07
216	ALL	UCART1	314350	3924350	0.018433	9901	DieselExhPM	4.80E-07	2.4YrCancerDerived_Inh	*	4.80E-07
235	ALL	UCART1	314250	3924450	0.018205	9901	DieselExhPM	4.74E-07	2.4YrCancerDerived_Inh	*	4.74E-07
218	ALL	UCART1	314550	3924350	0.018099	9901	DieselExhPM	4.71E-07	2.4YrCancerDerived_Inh	*	4.71E-07
217	ALL	UCART1	314450	3924350	0.017617	9901	DieselExhPM	4.59E-07	2.4YrCancerDerived_Inh	*	4.59E-07
255	ALL	UCART1	314250	3924550	0.016932	9901	DieselExhPM	4.41E-07	2.4YrCancerDerived_Inh	*	4.41E-07
259	ALL	UCART1	315050	3924550	0.015942	9901	DieselExhPM	4.15E-07	2.4YrCancerDerived_Inh	*	4.15E-07
170	ALL	UCART1	315150	3924050	0.015881	9901	DieselExhPM	4.14E-07	2.4YrCancerDerived_Inh	*	4.14E-07
185	ALL	UCART1	315150	3924150	0.015452	9901	DieselExhPM	4.02E-07	2.4YrCancerDerived_Inh	*	4.02E-07
155	ALL	UCART1	315150	3923950	0.015168	9901	DieselExhPM	3.95E-07	2.4YrCancerDerived_Inh	*	3.95E-07
123	ALL	UCART1	314850	3923750	0.014903	9901	DieselExhPM	3.88E-07	2.4YrCancerDerived_Inh	*	3.88E-07
200	ALL	UCART1	315150	3924250	0.014605	9901	DieselExhPM	3.80E-07	2.4YrCancerDerived_Inh	*	3.80E-07
137	ALL	UCART1	314350	3923850	0.014416	9901	DieselExhPM	3.75E-07	2.4YrCancerDerived_Inh	*	3.75E-07
122	ALL	UCART1	314750	3923750	0.014155	9901	DieselExhPM	3.69E-07	2.4YrCancerDerived_Inh	*	3.69E-07
275	ALL	UCART1	314250	3924650	0.013799	9901	DieselExhPM	3.59E-07	2.4YrCancerDerived_Inh	*	3.59E-07
220	ALL	UCART1	315150	3924350	0.012976	9901	DieselExhPM	3.38E-07	2.4YrCancerDerived_Inh	*	3.38E-07
121	ALL	UCART1	314650	3923750	0.012712	9901	DieselExhPM	3.31E-07	2.4YrCancerDerived_Inh	*	3.31E-07
171	ALL	UCART1	315250	3924050	0.010896	9901	DieselExhPM	2.84E-07	2.4YrCancerDerived_Inh	*	2.84E-07
236	ALL	UCART1	314350	3924450	0.010895	9901	DieselExhPM	2.84E-07	2.4YrCancerDerived_Inh	*	2.84E-07
120	ALL	UCART1	314550	3923750	0.010767	9901	DieselExhPM	2.80E-07	2.4YrCancerDerived_Inh	*	2.80E-07
156	ALL	UCART1	315250	3923950	0.010716	9901	DieselExhPM	2.79E-07	2.4YrCancerDerived_Inh	*	2.79E-07
240	ALL	UCART1	315150	3924450	0.010652	9901	DieselExhPM	2.77E-07	2.4YrCancerDerived_Inh	*	2.77E-07
238	ALL	UCART1	314550	3924450	0.010421	9901	DieselExhPM	2.71E-07	2.4YrCancerDerived_Inh	*	2.71E-07
186	ALL	UCART1	315250	3924150	0.010323	9901	DieselExhPM	2.69E-07	2.4YrCancerDerived_Inh	*	2.69E-07
201	ALL	UCART1	315250	3924250	0.009427	9901	DieselExhPM	2.45E-07	2.4YrCancerDerived_Inh	*	2.45E-07
237	ALL	UCART1	314450	3924450	0.009417	9901	DieselExhPM	2.45E-07	2.4YrCancerDerived_Inh	*	2.45E-07
103	ALL	UCART1	314850	3923650	0.009329	9901	DieselExhPM	2.43E-07	2.4YrCancerDerived_Inh	*	2.43E-07
299	ALL	UCART1	314750	3924750	0.009197	9901	DieselExhPM	2.39E-07	2.4YrCancerDerived_Inh	*	2.39E-07
279	ALL	UCART1	315050	3924650	0.008585	9901	DieselExhPM	2.24E-07	2.4YrCancerDerived_Inh	*	2.24E-07
300	ALL	UCART1	314850	3924750	0.008583	9901	DieselExhPM	2.23E-07	2.4YrCancerDerived_Inh	*	2.23E-07
102	ALL	UCART1	314750	3923650	0.008557	9901	DieselExhPM	2.23E-07	2.4YrCancerDerived_Inh	*	2.23E-07
256	ALL	UCART1	314350	3924550	0.008334	9901	DieselExhPM	2.17E-07	2.4YrCancerDerived_Inh	*	2.17E-07
119	ALL	UCART1	314450	3923750	0.008268	9901	DieselExhPM	2.15E-07	2.4YrCancerDerived_Inh	*	2.15E-07
221	ALL	UCART1	315250	3924350	0.008089	9901	DieselExhPM	2.11E-07	2.4YrCancerDerived_Inh	*	2.11E-07
298	ALL	UCART1	314650	3924750	0.008062	9901	DieselExhPM	2.10E-07	2.4YrCancerDerived_Inh	*	2.10E-07
258	ALL	UCART1	314550	3924550	0.007988	9901	DieselExhPM	2.08E-07	2.4YrCancerDerived_Inh	*	2.08E-07
157	ALL	UCART1	315350	3923950	0.007953	9901	DieselExhPM	2.07E-07	2.4YrCancerDerived_Inh	*	2.07E-07
172	ALL	UCART1	315350	3924050	0.007821	9901	DieselExhPM	2.04E-07	2.4YrCancerDerived_Inh	*	2.04E-07
260	ALL	UCART1	315150	3924550	0.007799	9901	DieselExhPM	2.03E-07	2.4YrCancerDerived_Inh	*	2.03E-07
143	ALL	UCART1	315350	3923850	0.007671	9901	DieselExhPM	2.00E-07	2.4YrCancerDerived_Inh	*	2.00E-07
214	ALL	UCART1	314150	3924350	0.007584	9901	DieselExhPM	1.97E-07	2.4YrCancerDerived_Inh	*	1.97E-07
104	ALL	UCART1	315250	3923650	0.007441	9901	DieselExhPM	1.94E-07	2.4YrCancerDerived_Inh	*	1.94E-07
101	ALL	UCART1	314650	3923650	0.007394	9901	DieselExhPM	1.93E-07	2.4YrCancerDerived_Inh	*	1.93E-07
187	ALL	UCART1	315350	3924150	0.007314	9901	DieselExhPM	1.90E-07	2.4YrCancerDerived_Inh	*	1.90E-07
136	ALL	UCART1	314250	3923850	0.007252	9901	DieselExhPM	1.89E-07	2.4YrCancerDerived_Inh	*	1.89E-07
124	ALL	UCART1	315350	3923750	0.007136	9901	DieselExhPM	1.86E-07	2.4YrCancerDerived_Inh	*	1.86E-07
83	ALL	UCART1	315050	3923550	0.006844	9901	DieselExhPM	1.78E-07	2.4YrCancerDerived_Inh	*	1.78E-07
82	ALL	UCART1	314950	3923550	0.006761	9901	DieselExhPM	1.76E-07	2.4YrCancerDerived_Inh	*	1.76E-07
257	ALL	UCART1	314450	3924550	0.006716	9901	DieselExhPM	1.75E-07	2.4YrCancerDerived_Inh	*	1.75E-07
84	ALL	UCART1	315150	3923550	0.006601	9901	DieselExhPM	1.72E-07	2.4YrCancerDerived_Inh	*	1.72E-07
278	ALL	UCART1	314550	3924650	0.006553	9901	DieselExhPM	1.71E-07	2.4YrCancerDerived_Inh	*	1.71E-07

*HARP - HRACalc v22118 4/16/2025 3:00:00 PM - Cancer Risk - Input File: F:\Jobs\59010001\ConHRA\HARPCON\hra\WkrCancer2.4YrHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
202	ALL	UCART1	315350	3924250	0.006546	9901	DieselExhPM	1.70E-07	2.4YrCancerDerived_Inh	*	1.70E-07
241	ALL	UCART1	315250	3924450	0.006461	9901	DieselExhPM	1.68E-07	2.4YrCancerDerived_Inh	*	1.68E-07
105	ALL	UCART1	315350	3923650	0.006352	9901	DieselExhPM	1.65E-07	2.4YrCancerDerived_Inh	*	1.65E-07
234	ALL	UCART1	314150	3924450	0.006332	9901	DieselExhPM	1.65E-07	2.4YrCancerDerived_Inh	*	1.65E-07
81	ALL	UCART1	314850	3923550	0.006282	9901	DieselExhPM	1.64E-07	2.4YrCancerDerived_Inh	*	1.64E-07
301	ALL	UCART1	314950	3924750	0.006194	9901	DieselExhPM	1.61E-07	2.4YrCancerDerived_Inh	*	1.61E-07
85	ALL	UCART1	315250	3923550	0.006111	9901	DieselExhPM	1.59E-07	2.4YrCancerDerived_Inh	*	1.59E-07
158	ALL	UCART1	315450	3923950	0.00611	9901	DieselExhPM	1.59E-07	2.4YrCancerDerived_Inh	*	1.59E-07
144	ALL	UCART1	315450	3923850	0.006039	9901	DieselExhPM	1.57E-07	2.4YrCancerDerived_Inh	*	1.57E-07
100	ALL	UCART1	314550	3923650	0.005957	9901	DieselExhPM	1.55E-07	2.4YrCancerDerived_Inh	*	1.55E-07
173	ALL	UCART1	315450	3924050	0.005897	9901	DieselExhPM	1.54E-07	2.4YrCancerDerived_Inh	*	1.54E-07
125	ALL	UCART1	315450	3923750	0.005786	9901	DieselExhPM	1.51E-07	2.4YrCancerDerived_Inh	*	1.51E-07
276	ALL	UCART1	314350	3924650	0.005684	9901	DieselExhPM	1.48E-07	2.4YrCancerDerived_Inh	*	1.48E-07
80	ALL	UCART1	314750	3923550	0.005599	9901	DieselExhPM	1.46E-07	2.4YrCancerDerived_Inh	*	1.46E-07
222	ALL	UCART1	315350	3924350	0.005517	9901	DieselExhPM	1.44E-07	2.4YrCancerDerived_Inh	*	1.44E-07
86	ALL	UCART1	315350	3923550	0.005478	9901	DieselExhPM	1.43E-07	2.4YrCancerDerived_Inh	*	1.43E-07
188	ALL	UCART1	315450	3924150	0.005435	9901	DieselExhPM	1.42E-07	2.4YrCancerDerived_Inh	*	1.42E-07
106	ALL	UCART1	315450	3923650	0.005367	9901	DieselExhPM	1.40E-07	2.4YrCancerDerived_Inh	*	1.40E-07
254	ALL	UCART1	314150	3924550	0.005321	9901	DieselExhPM	1.39E-07	2.4YrCancerDerived_Inh	*	1.39E-07
297	ALL	UCART1	314550	3924750	0.005313	9901	DieselExhPM	1.38E-07	2.4YrCancerDerived_Inh	*	1.38E-07
118	ALL	UCART1	314350	3923750	0.005305	9901	DieselExhPM	1.38E-07	2.4YrCancerDerived_Inh	*	1.38E-07
63	ALL	UCART1	315150	3923450	0.005116	9901	DieselExhPM	1.33E-07	2.4YrCancerDerived_Inh	*	1.33E-07
549	ALL	NON-RES	314624.33	3923582.3	0.005112	9901	DieselExhPM	1.33E-07	2.4YrCancerDerived_Inh	*	1.33E-07
62	ALL	UCART1	315050	3923450	0.005085	9901	DieselExhPM	1.32E-07	2.4YrCancerDerived_Inh	*	1.32E-07
277	ALL	UCART1	314450	3924650	0.005053	9901	DieselExhPM	1.32E-07	2.4YrCancerDerived_Inh	*	1.32E-07
64	ALL	UCART1	315250	3923450	0.004947	9901	DieselExhPM	1.29E-07	2.4YrCancerDerived_Inh	*	1.29E-07
280	ALL	UCART1	315150	3924650	0.004945	9901	DieselExhPM	1.29E-07	2.4YrCancerDerived_Inh	*	1.29E-07
61	ALL	UCART1	314950	3923450	0.004843	9901	DieselExhPM	1.26E-07	2.4YrCancerDerived_Inh	*	1.26E-07
145	ALL	UCART1	315550	3923850	0.004841	9901	DieselExhPM	1.26E-07	2.4YrCancerDerived_Inh	*	1.26E-07
261	ALL	UCART1	315250	3924550	0.004824	9901	DieselExhPM	1.26E-07	2.4YrCancerDerived_Inh	*	1.26E-07
87	ALL	UCART1	315450	3923550	0.004822	9901	DieselExhPM	1.26E-07	2.4YrCancerDerived_Inh	*	1.26E-07
203	ALL	UCART1	315450	3924250	0.004786	9901	DieselExhPM	1.25E-07	2.4YrCancerDerived_Inh	*	1.25E-07
159	ALL	UCART1	315550	3923950	0.004768	9901	DieselExhPM	1.24E-07	2.4YrCancerDerived_Inh	*	1.24E-07
126	ALL	UCART1	315550	3923750	0.004761	9901	DieselExhPM	1.24E-07	2.4YrCancerDerived_Inh	*	1.24E-07
79	ALL	UCART1	314650	3923550	0.004683	9901	DieselExhPM	1.22E-07	2.4YrCancerDerived_Inh	*	1.22E-07
274	ALL	UCART1	314150	3924650	0.004664	9901	DieselExhPM	1.21E-07	2.4YrCancerDerived_Inh	*	1.21E-07
65	ALL	UCART1	315350	3923450	0.004636	9901	DieselExhPM	1.21E-07	2.4YrCancerDerived_Inh	*	1.21E-07
174	ALL	UCART1	315550	3924050	0.004573	9901	DieselExhPM	1.19E-07	2.4YrCancerDerived_Inh	*	1.19E-07
107	ALL	UCART1	315550	3923650	0.004538	9901	DieselExhPM	1.18E-07	2.4YrCancerDerived_Inh	*	1.18E-07
321	ALL	UCART1	314750	3924850	0.004406	9901	DieselExhPM	1.15E-07	2.4YrCancerDerived_Inh	*	1.15E-07
60	ALL	UCART1	314850	3923450	0.004391	9901	DieselExhPM	1.14E-07	2.4YrCancerDerived_Inh	*	1.14E-07
242	ALL	UCART1	315350	3924450	0.004389	9901	DieselExhPM	1.14E-07	2.4YrCancerDerived_Inh	*	1.14E-07
320	ALL	UCART1	314650	3924850	0.004377	9901	DieselExhPM	1.14E-07	2.4YrCancerDerived_Inh	*	1.14E-07
302	ALL	UCART1	315050	3924750	0.004355	9901	DieselExhPM	1.13E-07	2.4YrCancerDerived_Inh	*	1.13E-07
99	ALL	UCART1	314450	3923650	0.004341	9901	DieselExhPM	1.13E-07	2.4YrCancerDerived_Inh	*	1.13E-07
66	ALL	UCART1	315450	3923450	0.004237	9901	DieselExhPM	1.10E-07	2.4YrCancerDerived_Inh	*	1.10E-07
88	ALL	UCART1	315550	3923550	0.004196	9901	DieselExhPM	1.09E-07	2.4YrCancerDerived_Inh	*	1.09E-07
189	ALL	UCART1	315550	3924150	0.004176	9901	DieselExhPM	1.09E-07	2.4YrCancerDerived_Inh	*	1.09E-07
223	ALL	UCART1	315450	3924350	0.004045	9901	DieselExhPM	1.05E-07	2.4YrCancerDerived_Inh	*	1.05E-07
294	ALL	UCART1	314250	3924750	0.004018	9901	DieselExhPM	1.05E-07	2.4YrCancerDerived_Inh	*	1.05E-07
296	ALL	UCART1	314450	3924750	0.003989	9901	DieselExhPM	1.04E-07	2.4YrCancerDerived_Inh	*	1.04E-07
45	ALL	UCART1	315250	3923350	0.003985	9901	DieselExhPM	1.04E-07	2.4YrCancerDerived_Inh	*	1.04E-07
44	ALL	UCART1	315150	3923350	0.00398	9901	DieselExhPM	1.04E-07	2.4YrCancerDerived_Inh	*	1.04E-07
322	ALL	UCART1	314850	3924850	0.003952	9901	DieselExhPM	1.03E-07	2.4YrCancerDerived_Inh	*	1.03E-07
127	ALL	UCART1	315650	3923750	0.003949	9901	DieselExhPM	1.03E-07	2.4YrCancerDerived_Inh	*	1.03E-07
146	ALL	UCART1	315650	3923850	0.003941	9901	DieselExhPM	1.03E-07	2.4YrCancerDerived_Inh	*	1.03E-07
46	ALL	UCART1	315350	3923350	0.003863	9901	DieselExhPM	1.01E-07	2.4YrCancerDerived_Inh	*	1.01E-07
108	ALL	UCART1	315650	3923650	0.003843	9901	DieselExhPM	1.00E-07	2.4YrCancerDerived_Inh	*	1.00E-07
43	ALL	UCART1	315050	3923350	0.003841	9901	DieselExhPM	1.00E-07	2.4YrCancerDerived_Inh	*	1.00E-07
319	ALL	UCART1	314550	3924850	0.003822	9901	DieselExhPM	9.95E-08	2.4YrCancerDerived_Inh	*	9.95E-08
160	ALL	UCART1	315650	3923950	0.003822	9901	DieselExhPM	9.95E-08	2.4YrCancerDerived_Inh	*	9.95E-08
59	ALL	UCART1	314750	3923450	0.003809	9901	DieselExhPM	9.92E-08	2.4YrCancerDerived_Inh	*	9.92E-08
293	ALL	UCART1	314150	3924750	0.003714	9901	DieselExhPM	9.67E-08	2.4YrCancerDerived_Inh	*	9.67E-08
295	ALL	UCART1	314350	3924750	0.003673	9901	DieselExhPM	9.56E-08	2.4YrCancerDerived_Inh	*	9.56E-08
175	ALL	UCART1	315650	3924050	0.003595	9901	DieselExhPM	9.36E-08	2.4YrCancerDerived_Inh	*	9.36E-08
78	ALL	UCART1	314550	3923550	0.00357	9901	DieselExhPM	9.30E-08	2.4YrCancerDerived_Inh	*	9.30E-08
42	ALL	UCART1	314950	3923350	0.003569	9901	DieselExhPM	9.29E-08	2.4YrCancerDerived_Inh	*	9.29E-08
281	ALL	UCART1	315250	3924650	0.003452	9901	DieselExhPM	8.99E-08	2.4YrCancerDerived_Inh	*	8.99E-08
262	ALL	UCART1	315350	3924550	0.003381	9901	DieselExhPM	8.80E-08	2.4YrCancerDerived_Inh	*	8.80E-08
190	ALL	UCART1	315650	3924150	0.003306	9901	DieselExhPM	8.61E-08	2.4YrCancerDerived_Inh	*	8.61E-08
243	ALL	UCART1	315450	3924450	0.003274	9901	DieselExhPM	8.52E-08	2.4YrCancerDerived_Inh	*	8.52E-08
323	ALL	UCART1	314950	3924850	0.00323	9901	DieselExhPM	8.41E-08	2.4YrCancerDerived_Inh	*	8.41E-08
27	ALL	UCART1	315250	3923250	0.00321	9901	DieselExhPM	8.36E-08	2.4YrCancerDerived_Inh	*	8.36E-08
318	ALL	UCART1	314450	3924850	0.003203	9901	DieselExhPM	8.34E-08	2.4YrCancerDerived_Inh	*	8.34E-08
41	ALL	UCART1	314850	3923350	0.003182	9901	DieselExhPM	8.29E-08	2.4YrCancerDerived_Inh	*	8.29E-08
58	ALL	UCART1	314650	3923450	0.003155	9901	DieselExhPM	8.22E-08	2.4YrCancerDerived_Inh	*	8.22E-08
303	ALL	UCART1	315150	3924750	0.003146	9901	DieselExhPM	8.19E-08	2.4YrCancerDerived_Inh	*	8.19E-08

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
26	ALL	UCART1	315150	3923250	0.003124	9901	DieselExhPM	8.13E-08	2.4YrCancerDerived_Inh	*	8.13E-08
161	ALL	UCART1	315750	3923950	0.003114	9901	DieselExhPM	8.11E-08	2.4YrCancerDerived_Inh	*	8.11E-08
224	ALL	UCART1	315550	3924350	0.003103	9901	DieselExhPM	8.08E-08	2.4YrCancerDerived_Inh	*	8.08E-08
213	ALL	UCART1	314050	3924350	0.00303	9901	DieselExhPM	7.89E-08	2.4YrCancerDerived_Inh	*	7.89E-08
233	ALL	UCART1	314050	3924450	0.002976	9901	DieselExhPM	7.75E-08	2.4YrCancerDerived_Inh	*	7.75E-08
176	ALL	UCART1	315750	3924050	0.002953	9901	DieselExhPM	7.69E-08	2.4YrCancerDerived_Inh	*	7.69E-08
25	ALL	UCART1	315050	3923250	0.002951	9901	DieselExhPM	7.69E-08	2.4YrCancerDerived_Inh	*	7.69E-08
341	ALL	UCART1	314650	3924950	0.002931	9901	DieselExhPM	7.63E-08	2.4YrCancerDerived_Inh	*	7.63E-08
205	ALL	UCART1	315650	3924250	0.002904	9901	DieselExhPM	7.56E-08	2.4YrCancerDerived_Inh	*	7.56E-08
340	ALL	UCART1	314550	3924950	0.002823	9901	DieselExhPM	7.35E-08	2.4YrCancerDerived_Inh	*	7.35E-08
198	ALL	UCART1	314050	3924250	0.002788	9901	DieselExhPM	7.26E-08	2.4YrCancerDerived_Inh	*	7.26E-08
98	ALL	UCART1	314350	3923650	0.002787	9901	DieselExhPM	7.26E-08	2.4YrCancerDerived_Inh	*	7.26E-08
317	ALL	UCART1	314350	3924850	0.002783	9901	DieselExhPM	7.25E-08	2.4YrCancerDerived_Inh	*	7.25E-08
342	ALL	UCART1	314750	3924950	0.002779	9901	DieselExhPM	7.24E-08	2.4YrCancerDerived_Inh	*	7.24E-08
253	ALL	UCART1	314050	3924550	0.00276	9901	DieselExhPM	7.19E-08	2.4YrCancerDerived_Inh	*	7.19E-08
40	ALL	UCART1	314750	3923350	0.002733	9901	DieselExhPM	7.12E-08	2.4YrCancerDerived_Inh	*	7.12E-08
191	ALL	UCART1	315750	3924150	0.002701	9901	DieselExhPM	7.03E-08	2.4YrCancerDerived_Inh	*	7.03E-08
24	ALL	UCART1	314950	3923250	0.002699	9901	DieselExhPM	7.03E-08	2.4YrCancerDerived_Inh	*	7.03E-08
117	ALL	UCART1	314250	3923750	0.002659	9901	DieselExhPM	6.92E-08	2.4YrCancerDerived_Inh	*	6.92E-08
324	ALL	UCART1	315050	3924850	0.002649	9901	DieselExhPM	6.90E-08	2.4YrCancerDerived_Inh	*	6.90E-08
263	ALL	UCART1	315450	3924550	0.002649	9901	DieselExhPM	6.90E-08	2.4YrCancerDerived_Inh	*	6.90E-08
77	ALL	UCART1	314450	3923550	0.002646	9901	DieselExhPM	6.89E-08	2.4YrCancerDerived_Inh	*	6.89E-08
282	ALL	UCART1	315350	3924650	0.002597	9901	DieselExhPM	6.76E-08	2.4YrCancerDerived_Inh	*	6.76E-08
244	ALL	UCART1	315550	3924450	0.002578	9901	DieselExhPM	6.71E-08	2.4YrCancerDerived_Inh	*	6.71E-08
548	ALL	NON-RES	314280.18	3923708.25	0.002566	9901	DieselExhPM	6.68E-08	2.4YrCancerDerived_Inh	*	6.68E-08
339	ALL	UCART1	314450	3924950	0.00255	9901	DieselExhPM	6.64E-08	2.4YrCancerDerived_Inh	*	6.64E-08
273	ALL	UCART1	314050	3924650	0.00252	9901	DieselExhPM	6.56E-08	2.4YrCancerDerived_Inh	*	6.56E-08
316	ALL	UCART1	314250	3924850	0.002517	9901	DieselExhPM	6.55E-08	2.4YrCancerDerived_Inh	*	6.55E-08
304	ALL	UCART1	315250	3924750	0.002481	9901	DieselExhPM	6.46E-08	2.4YrCancerDerived_Inh	*	6.46E-08
225	ALL	UCART1	315650	3924350	0.00248	9901	DieselExhPM	6.46E-08	2.4YrCancerDerived_Inh	*	6.46E-08
550	ALL	NON-RES	314388.39	3923589.4	0.002474	9901	DieselExhPM	6.44E-08	2.4YrCancerDerived_Inh	*	6.44E-08
57	ALL	UCART1	314550	3923450	0.00247	9901	DieselExhPM	6.43E-08	2.4YrCancerDerived_Inh	*	6.43E-08
343	ALL	UCART1	314850	3924950	0.002467	9901	DieselExhPM	6.42E-08	2.4YrCancerDerived_Inh	*	6.42E-08
206	ALL	UCART1	315750	3924250	0.002394	9901	DieselExhPM	6.23E-08	2.4YrCancerDerived_Inh	*	6.23E-08
23	ALL	UCART1	314850	3923250	0.002379	9901	DieselExhPM	6.20E-08	2.4YrCancerDerived_Inh	*	6.20E-08
315	ALL	UCART1	314150	3924850	0.002353	9901	DieselExhPM	6.13E-08	2.4YrCancerDerived_Inh	*	6.13E-08
11	ALL	UCART1	315050	3923150	0.002311	9901	DieselExhPM	6.02E-08	2.4YrCancerDerived_Inh	*	6.02E-08
292	ALL	UCART1	314050	3924750	0.002284	9901	DieselExhPM	5.95E-08	2.4YrCancerDerived_Inh	*	5.95E-08
183	ALL	UCART1	314050	3924150	0.002277	9901	DieselExhPM	5.93E-08	2.4YrCancerDerived_Inh	*	5.93E-08
39	ALL	UCART1	314650	3923350	0.002252	9901	DieselExhPM	5.86E-08	2.4YrCancerDerived_Inh	*	5.86E-08
338	ALL	UCART1	314350	3924950	0.002243	9901	DieselExhPM	5.84E-08	2.4YrCancerDerived_Inh	*	5.84E-08
325	ALL	UCART1	315150	3924850	0.00223	9901	DieselExhPM	5.81E-08	2.4YrCancerDerived_Inh	*	5.81E-08
264	ALL	UCART1	315550	3924550	0.002133	9901	DieselExhPM	5.55E-08	2.4YrCancerDerived_Inh	*	5.55E-08
344	ALL	UCART1	314950	3924950	0.002128	9901	DieselExhPM	5.54E-08	2.4YrCancerDerived_Inh	*	5.54E-08
358	ALL	UCART1	314550	3925050	0.002123	9901	DieselExhPM	5.53E-08	2.4YrCancerDerived_Inh	*	5.53E-08
359	ALL	UCART1	314650	3925050	0.002122	9901	DieselExhPM	5.53E-08	2.4YrCancerDerived_Inh	*	5.53E-08
283	ALL	UCART1	315450	3924650	0.002121	9901	DieselExhPM	5.52E-08	2.4YrCancerDerived_Inh	*	5.52E-08
245	ALL	UCART1	315650	3924450	0.002115	9901	DieselExhPM	5.51E-08	2.4YrCancerDerived_Inh	*	5.51E-08
135	ALL	UCART1	314150	3923850	0.002111	9901	DieselExhPM	5.50E-08	2.4YrCancerDerived_Inh	*	5.50E-08
10	ALL	UCART1	314950	3923150	0.002089	9901	DieselExhPM	5.44E-08	2.4YrCancerDerived_Inh	*	5.44E-08
226	ALL	UCART1	315750	3924350	0.00208	9901	DieselExhPM	5.42E-08	2.4YrCancerDerived_Inh	*	5.42E-08
22	ALL	UCART1	314750	3923250	0.002037	9901	DieselExhPM	5.30E-08	2.4YrCancerDerived_Inh	*	5.30E-08
337	ALL	UCART1	314250	3924950	0.002018	9901	DieselExhPM	5.25E-08	2.4YrCancerDerived_Inh	*	5.25E-08
357	ALL	UCART1	314450	3925050	0.002017	9901	DieselExhPM	5.25E-08	2.4YrCancerDerived_Inh	*	5.25E-08
305	ALL	UCART1	315350	3924750	0.002	9901	DieselExhPM	5.21E-08	2.4YrCancerDerived_Inh	*	5.21E-08
360	ALL	UCART1	314750	3925050	0.001992	9901	DieselExhPM	5.19E-08	2.4YrCancerDerived_Inh	*	5.19E-08
314	ALL	UCART1	314050	3924850	0.001937	9901	DieselExhPM	5.04E-08	2.4YrCancerDerived_Inh	*	5.04E-08
345	ALL	UCART1	315050	3924950	0.001861	9901	DieselExhPM	4.84E-08	2.4YrCancerDerived_Inh	*	4.84E-08
336	ALL	UCART1	314150	3924950	0.001858	9901	DieselExhPM	4.84E-08	2.4YrCancerDerived_Inh	*	4.84E-08
356	ALL	UCART1	314350	3925050	0.001854	9901	DieselExhPM	4.83E-08	2.4YrCancerDerived_Inh	*	4.83E-08
326	ALL	UCART1	315250	3924850	0.00185	9901	DieselExhPM	4.82E-08	2.4YrCancerDerived_Inh	*	4.82E-08
9	ALL	UCART1	314850	3923150	0.001828	9901	DieselExhPM	4.76E-08	2.4YrCancerDerived_Inh	*	4.76E-08
56	ALL	UCART1	314450	3923450	0.001826	9901	DieselExhPM	4.75E-08	2.4YrCancerDerived_Inh	*	4.75E-08
76	ALL	UCART1	314350	3923550	0.001802	9901	DieselExhPM	4.69E-08	2.4YrCancerDerived_Inh	*	4.69E-08
265	ALL	UCART1	315650	3924550	0.001795	9901	DieselExhPM	4.67E-08	2.4YrCancerDerived_Inh	*	4.67E-08
361	ALL	UCART1	314850	3925050	0.001795	9901	DieselExhPM	4.67E-08	2.4YrCancerDerived_Inh	*	4.67E-08
252	ALL	UCART1	313950	3924550	0.001789	9901	DieselExhPM	4.66E-08	2.4YrCancerDerived_Inh	*	4.66E-08
246	ALL	UCART1	315750	3924450	0.001783	9901	DieselExhPM	4.64E-08	2.4YrCancerDerived_Inh	*	4.64E-08
232	ALL	UCART1	313950	3924450	0.00178	9901	DieselExhPM	4.63E-08	2.4YrCancerDerived_Inh	*	4.63E-08
38	ALL	UCART1	314550	3923350	0.00178	9901	DieselExhPM	4.63E-08	2.4YrCancerDerived_Inh	*	4.63E-08
284	ALL	UCART1	315550	3924650	0.001754	9901	DieselExhPM	4.57E-08	2.4YrCancerDerived_Inh	*	4.57E-08
272	ALL	UCART1	313950	3924650	0.001742	9901	DieselExhPM	4.54E-08	2.4YrCancerDerived_Inh	*	4.54E-08
355	ALL	UCART1	314250	3925050	0.001707	9901	DieselExhPM	4.44E-08	2.4YrCancerDerived_Inh	*	4.44E-08
375	ALL	UCART1	314550	3925150	0.001704	9901	DieselExhPM	4.44E-08	2.4YrCancerDerived_Inh	*	4.44E-08
21	ALL	UCART1	314650	3923250	0.001685	9901	DieselExhPM	4.39E-08	2.4YrCancerDerived_Inh	*	4.39E-08
374	ALL	UCART1	314450	3925150	0.001684	9901	DieselExhPM	4.39E-08	2.4YrCancerDerived_Inh	*	4.39E-08
306	ALL	UCART1	315450	3924750	0.001677	9901	DieselExhPM	4.37E-08	2.4YrCancerDerived_Inh	*	4.37E-08

*HARP - HRACalc v22118 4/16/2025 3:00:00 PM - Cancer Risk - Input File: F:\Jobs\59010001\ConHRA\HARPCON\hra\WkrCancer2.4YrHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
376	ALL	UCART1	314650	3925150	0.001672	9901	DieselExhPM	4.35E-08	2.4YrCancerDerived_Inh	*	4.35E-08
212	ALL	UCART1	313950	3924350	0.001671	9901	DieselExhPM	4.35E-08	2.4YrCancerDerived_Inh	*	4.35E-08
291	ALL	UCART1	313950	3924750	0.001657	9901	DieselExhPM	4.32E-08	2.4YrCancerDerived_Inh	*	4.32E-08
168	ALL	UCART1	314050	3924050	0.001652	9901	DieselExhPM	4.30E-08	2.4YrCancerDerived_Inh	*	4.30E-08
97	ALL	UCART1	314250	3923650	0.001644	9901	DieselExhPM	4.28E-08	2.4YrCancerDerived_Inh	*	4.28E-08
346	ALL	UCART1	315150	3924950	0.00164	9901	DieselExhPM	4.27E-08	2.4YrCancerDerived_Inh	*	4.27E-08
373	ALL	UCART1	314350	3925150	0.001627	9901	DieselExhPM	4.24E-08	2.4YrCancerDerived_Inh	*	4.24E-08
335	ALL	UCART1	314050	3924950	0.001624	9901	DieselExhPM	4.23E-08	2.4YrCancerDerived_Inh	*	4.23E-08
354	ALL	UCART1	314150	3925050	0.001585	9901	DieselExhPM	4.13E-08	2.4YrCancerDerived_Inh	*	4.13E-08
362	ALL	UCART1	314950	3925050	0.001579	9901	DieselExhPM	4.11E-08	2.4YrCancerDerived_Inh	*	4.11E-08
8	ALL	UCART1	314750	3923150	0.001567	9901	DieselExhPM	4.08E-08	2.4YrCancerDerived_Inh	*	4.08E-08
327	ALL	UCART1	315350	3924850	0.001556	9901	DieselExhPM	4.05E-08	2.4YrCancerDerived_Inh	*	4.05E-08
313	ALL	UCART1	313950	3924850	0.001526	9901	DieselExhPM	3.97E-08	2.4YrCancerDerived_Inh	*	3.97E-08
266	ALL	UCART1	315750	3924550	0.001525	9901	DieselExhPM	3.97E-08	2.4YrCancerDerived_Inh	*	3.97E-08
285	ALL	UCART1	315650	3924650	0.00152	9901	DieselExhPM	3.96E-08	2.4YrCancerDerived_Inh	*	3.96E-08
551	ALL	NON-RES	314278.41	3923589.4	0.001519	9901	DieselExhPM	3.96E-08	2.4YrCancerDerived_Inh	*	3.96E-08
372	ALL	UCART1	314250	3925150	0.001519	9901	DieselExhPM	3.95E-08	2.4YrCancerDerived_Inh	*	3.95E-08
377	ALL	UCART1	314750	3925150	0.001513	9901	DieselExhPM	3.94E-08	2.4YrCancerDerived_Inh	*	3.94E-08
307	ALL	UCART1	315550	3924750	0.001454	9901	DieselExhPM	3.79E-08	2.4YrCancerDerived_Inh	*	3.79E-08
347	ALL	UCART1	315250	3924950	0.001433	9901	DieselExhPM	3.73E-08	2.4YrCancerDerived_Inh	*	3.73E-08
197	ALL	UCART1	313950	3924250	0.001427	9901	DieselExhPM	3.72E-08	2.4YrCancerDerived_Inh	*	3.72E-08
363	ALL	UCART1	315050	3925050	0.001422	9901	DieselExhPM	3.70E-08	2.4YrCancerDerived_Inh	*	3.70E-08
389	ALL	UCART1	314450	3925250	0.001409	9901	DieselExhPM	3.67E-08	2.4YrCancerDerived_Inh	*	3.67E-08
353	ALL	UCART1	314050	3925050	0.001407	9901	DieselExhPM	3.66E-08	2.4YrCancerDerived_Inh	*	3.66E-08
390	ALL	UCART1	314550	3925250	0.001405	9901	DieselExhPM	3.66E-08	2.4YrCancerDerived_Inh	*	3.66E-08
371	ALL	UCART1	314150	3925150	0.001398	9901	DieselExhPM	3.64E-08	2.4YrCancerDerived_Inh	*	3.64E-08
388	ALL	UCART1	314350	3925250	0.001392	9901	DieselExhPM	3.62E-08	2.4YrCancerDerived_Inh	*	3.62E-08
334	ALL	UCART1	313950	3924950	0.001377	9901	DieselExhPM	3.58E-08	2.4YrCancerDerived_Inh	*	3.58E-08
378	ALL	UCART1	314850	3925150	0.001373	9901	DieselExhPM	3.58E-08	2.4YrCancerDerived_Inh	*	3.58E-08
391	ALL	UCART1	314650	3925250	0.001364	9901	DieselExhPM	3.55E-08	2.4YrCancerDerived_Inh	*	3.55E-08
328	ALL	UCART1	315450	3924850	0.001354	9901	DieselExhPM	3.53E-08	2.4YrCancerDerived_Inh	*	3.53E-08
37	ALL	UCART1	314450	3923350	0.00135	9901	DieselExhPM	3.51E-08	2.4YrCancerDerived_Inh	*	3.51E-08
20	ALL	UCART1	314550	3923250	0.001349	9901	DieselExhPM	3.51E-08	2.4YrCancerDerived_Inh	*	3.51E-08
387	ALL	UCART1	314250	3925250	0.001341	9901	DieselExhPM	3.49E-08	2.4YrCancerDerived_Inh	*	3.49E-08
116	ALL	UCART1	314150	3923750	0.001336	9901	DieselExhPM	3.48E-08	2.4YrCancerDerived_Inh	*	3.48E-08
286	ALL	UCART1	315750	3924650	0.001321	9901	DieselExhPM	3.44E-08	2.4YrCancerDerived_Inh	*	3.44E-08
7	ALL	UCART1	314650	3923150	0.001306	9901	DieselExhPM	3.40E-08	2.4YrCancerDerived_Inh	*	3.40E-08
153	ALL	UCART1	314050	3923950	0.001306	9901	DieselExhPM	3.40E-08	2.4YrCancerDerived_Inh	*	3.40E-08
55	ALL	UCART1	314350	3923450	0.001299	9901	DieselExhPM	3.38E-08	2.4YrCancerDerived_Inh	*	3.38E-08
364	ALL	UCART1	315150	3925050	0.001282	9901	DieselExhPM	3.34E-08	2.4YrCancerDerived_Inh	*	3.34E-08
308	ALL	UCART1	315650	3924750	0.001277	9901	DieselExhPM	3.33E-08	2.4YrCancerDerived_Inh	*	3.33E-08
271	ALL	UCART1	313850	3924650	0.001257	9901	DieselExhPM	3.27E-08	2.4YrCancerDerived_Inh	*	3.27E-08
386	ALL	UCART1	314150	3925250	0.001255	9901	DieselExhPM	3.27E-08	2.4YrCancerDerived_Inh	*	3.27E-08
348	ALL	UCART1	315350	3924950	0.001254	9901	DieselExhPM	3.27E-08	2.4YrCancerDerived_Inh	*	3.27E-08
370	ALL	UCART1	314050	3925150	0.001254	9901	DieselExhPM	3.26E-08	2.4YrCancerDerived_Inh	*	3.26E-08
290	ALL	UCART1	313850	3924750	0.001252	9901	DieselExhPM	3.26E-08	2.4YrCancerDerived_Inh	*	3.26E-08
392	ALL	UCART1	314750	3925250	0.001245	9901	DieselExhPM	3.24E-08	2.4YrCancerDerived_Inh	*	3.24E-08
352	ALL	UCART1	313950	3925050	0.001235	9901	DieselExhPM	3.22E-08	2.4YrCancerDerived_Inh	*	3.22E-08
547	ALL	NON-RES	314152.46	3923718.89	0.001234	9901	DieselExhPM	3.21E-08	2.4YrCancerDerived_Inh	*	3.21E-08
251	ALL	UCART1	313850	3924550	0.001229	9901	DieselExhPM	3.20E-08	2.4YrCancerDerived_Inh	*	3.20E-08
312	ALL	UCART1	313850	3924850	0.001214	9901	DieselExhPM	3.16E-08	2.4YrCancerDerived_Inh	*	3.16E-08
134	ALL	UCART1	314050	3923850	0.001206	9901	DieselExhPM	3.14E-08	2.4YrCancerDerived_Inh	*	3.14E-08
379	ALL	UCART1	314950	3925150	0.001202	9901	DieselExhPM	3.13E-08	2.4YrCancerDerived_Inh	*	3.13E-08
329	ALL	UCART1	315550	3924850	0.001199	9901	DieselExhPM	3.12E-08	2.4YrCancerDerived_Inh	*	3.12E-08
401	ALL	UCART1	314350	3925350	0.001196	9901	DieselExhPM	3.11E-08	2.4YrCancerDerived_Inh	*	3.11E-08
75	ALL	UCART1	314250	3923550	0.001195	9901	DieselExhPM	3.11E-08	2.4YrCancerDerived_Inh	*	3.11E-08
400	ALL	UCART1	314250	3925350	0.001181	9901	DieselExhPM	3.08E-08	2.4YrCancerDerived_Inh	*	3.08E-08
231	ALL	UCART1	313850	3924450	0.001162	9901	DieselExhPM	3.02E-08	2.4YrCancerDerived_Inh	*	3.02E-08
365	ALL	UCART1	315250	3925050	0.00116	9901	DieselExhPM	3.02E-08	2.4YrCancerDerived_Inh	*	3.02E-08
402	ALL	UCART1	314450	3925350	0.001154	9901	DieselExhPM	3.01E-08	2.4YrCancerDerived_Inh	*	3.01E-08
333	ALL	UCART1	313850	3924950	0.001148	9901	DieselExhPM	2.99E-08	2.4YrCancerDerived_Inh	*	2.99E-08
403	ALL	UCART1	314550	3925350	0.001141	9901	DieselExhPM	2.97E-08	2.4YrCancerDerived_Inh	*	2.97E-08
182	ALL	UCART1	313950	3924150	0.001117	9901	DieselExhPM	2.91E-08	2.4YrCancerDerived_Inh	*	2.91E-08
380	ALL	UCART1	315050	3925150	0.001116	9901	DieselExhPM	2.91E-08	2.4YrCancerDerived_Inh	*	2.91E-08
349	ALL	UCART1	315450	3924950	0.001115	9901	DieselExhPM	2.90E-08	2.4YrCancerDerived_Inh	*	2.90E-08
309	ALL	UCART1	315750	3924750	0.001113	9901	DieselExhPM	2.90E-08	2.4YrCancerDerived_Inh	*	2.90E-08
404	ALL	UCART1	314650	3925350	0.001107	9901	DieselExhPM	2.88E-08	2.4YrCancerDerived_Inh	*	2.88E-08
393	ALL	UCART1	314850	3925250	0.0011	9901	DieselExhPM	2.86E-08	2.4YrCancerDerived_Inh	*	2.86E-08
330	ALL	UCART1	315650	3924850	0.001081	9901	DieselExhPM	2.82E-08	2.4YrCancerDerived_Inh	*	2.82E-08
6	ALL	UCART1	314550	3923150	0.001063	9901	DieselExhPM	2.77E-08	2.4YrCancerDerived_Inh	*	2.77E-08
19	ALL	UCART1	314450	3923250	0.001052	9901	DieselExhPM	2.74E-08	2.4YrCancerDerived_Inh	*	2.74E-08
552	ALL	NON-RES	314193.26	3923587.62	0.001051	9901	DieselExhPM	2.74E-08	2.4YrCancerDerived_Inh	*	2.74E-08
381	ALL	UCART1	315150	3925150	0.001051	9901	DieselExhPM	2.74E-08	2.4YrCancerDerived_Inh	*	2.74E-08
211	ALL	UCART1	313850	3924350	0.001045	9901	DieselExhPM	2.72E-08	2.4YrCancerDerived_Inh	*	2.72E-08
366	ALL	UCART1	315350	3925050	0.001045	9901	DieselExhPM	2.72E-08	2.4YrCancerDerived_Inh	*	2.72E-08
96	ALL	UCART1	314150	3923650	0.001016	9901	DieselExhPM	2.65E-08	2.4YrCancerDerived_Inh	*	2.65E-08
405	ALL	UCART1	314750	3925350	0.00101	9901	DieselExhPM	2.63E-08	2.4YrCancerDerived_Inh	*	2.63E-08

*HARP - HRACalc v22118 4/16/2025 3:00:00 PM - Cancer Risk - Input File: F:\Jobs\59010001\ConHRA\HARPCON\hra\WkrCancer2.4YrHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
350	ALL	UCART1	315550	3924950	0.001005	9901	DieselExhPM	2.62E-08	2.4YrCancerDerived_Inh	*	2.62E-08
412	ALL	UCART1	314450	3925450	0.001005	9901	DieselExhPM	2.62E-08	2.4YrCancerDerived_Inh	*	2.62E-08
36	ALL	UCART1	314350	3923350	0.001001	9901	DieselExhPM	2.61E-08	2.4YrCancerDerived_Inh	*	2.61E-08
394	ALL	UCART1	314950	3925250	0.001	9901	DieselExhPM	2.60E-08	2.4YrCancerDerived_Inh	*	2.60E-08
413	ALL	UCART1	314550	3925450	0.00098	9901	DieselExhPM	2.55E-08	2.4YrCancerDerived_Inh	*	2.55E-08
331	ALL	UCART1	315750	3924850	0.00097	9901	DieselExhPM	2.53E-08	2.4YrCancerDerived_Inh	*	2.53E-08
382	ALL	UCART1	315250	3925150	0.000963	9901	DieselExhPM	2.51E-08	2.4YrCancerDerived_Inh	*	2.51E-08
311	ALL	UCART1	313750	3924850	0.00096	9901	DieselExhPM	2.50E-08	2.4YrCancerDerived_Inh	*	2.50E-08
395	ALL	UCART1	315050	3925250	0.00096	9901	DieselExhPM	2.50E-08	2.4YrCancerDerived_Inh	*	2.50E-08
289	ALL	UCART1	313750	3924750	0.000954	9901	DieselExhPM	2.48E-08	2.4YrCancerDerived_Inh	*	2.48E-08
414	ALL	UCART1	314650	3925450	0.000949	9901	DieselExhPM	2.47E-08	2.4YrCancerDerived_Inh	*	2.47E-08
332	ALL	UCART1	313750	3924950	0.000946	9901	DieselExhPM	2.46E-08	2.4YrCancerDerived_Inh	*	2.46E-08
367	ALL	UCART1	315450	3925050	0.000939	9901	DieselExhPM	2.44E-08	2.4YrCancerDerived_Inh	*	2.44E-08
152	ALL	UCART1	313950	3923950	0.000936	9901	DieselExhPM	2.44E-08	2.4YrCancerDerived_Inh	*	2.44E-08
270	ALL	UCART1	313750	3924650	0.000931	9901	DieselExhPM	2.43E-08	2.4YrCancerDerived_Inh	*	2.43E-08
406	ALL	UCART1	314850	3925350	0.000929	9901	DieselExhPM	2.42E-08	2.4YrCancerDerived_Inh	*	2.42E-08
351	ALL	UCART1	315650	3924950	0.000921	9901	DieselExhPM	2.40E-08	2.4YrCancerDerived_Inh	*	2.40E-08
54	ALL	UCART1	314250	3923450	0.000921	9901	DieselExhPM	2.40E-08	2.4YrCancerDerived_Inh	*	2.40E-08
396	ALL	UCART1	315150	3925250	0.000919	9901	DieselExhPM	2.39E-08	2.4YrCancerDerived_Inh	*	2.39E-08
383	ALL	UCART1	315350	3925150	0.000889	9901	DieselExhPM	2.32E-08	2.4YrCancerDerived_Inh	*	2.32E-08
546	ALL	NON-RES	314074.41	3923738.41	0.000888	9901	DieselExhPM	2.31E-08	2.4YrCancerDerived_Inh	*	2.31E-08
250	ALL	UCART1	313750	3924550	0.000888	9901	DieselExhPM	2.31E-08	2.4YrCancerDerived_Inh	*	2.31E-08
415	ALL	UCART1	314750	3925450	0.000888	9901	DieselExhPM	2.31E-08	2.4YrCancerDerived_Inh	*	2.31E-08
196	ALL	UCART1	313850	3924250	0.000873	9901	DieselExhPM	2.27E-08	2.4YrCancerDerived_Inh	*	2.27E-08
397	ALL	UCART1	315250	3925250	0.000859	9901	DieselExhPM	2.24E-08	2.4YrCancerDerived_Inh	*	2.24E-08
133	ALL	UCART1	313950	3923850	0.000859	9901	DieselExhPM	2.24E-08	2.4YrCancerDerived_Inh	*	2.24E-08
407	ALL	UCART1	314950	3925350	0.000858	9901	DieselExhPM	2.23E-08	2.4YrCancerDerived_Inh	*	2.23E-08
167	ALL	UCART1	313950	3924050	0.000854	9901	DieselExhPM	2.22E-08	2.4YrCancerDerived_Inh	*	2.22E-08
368	ALL	UCART1	315550	3925050	0.000851	9901	DieselExhPM	2.22E-08	2.4YrCancerDerived_Inh	*	2.22E-08
5	ALL	UCART1	314450	3923150	0.00085	9901	DieselExhPM	2.21E-08	2.4YrCancerDerived_Inh	*	2.21E-08
115	ALL	UCART1	314050	3923750	0.000823	9901	DieselExhPM	2.14E-08	2.4YrCancerDerived_Inh	*	2.14E-08
74	ALL	UCART1	314150	3923550	0.000822	9901	DieselExhPM	2.14E-08	2.4YrCancerDerived_Inh	*	2.14E-08
230	ALL	UCART1	313750	3924450	0.000821	9901	DieselExhPM	2.14E-08	2.4YrCancerDerived_Inh	*	2.14E-08
151	ALL	UCART1	313850	3923950	0.00082	9901	DieselExhPM	2.13E-08	2.4YrCancerDerived_Inh	*	2.13E-08
398	ALL	UCART1	315350	3925250	0.000814	9901	DieselExhPM	2.12E-08	2.4YrCancerDerived_Inh	*	2.12E-08
408	ALL	UCART1	315050	3925350	0.000809	9901	DieselExhPM	2.11E-08	2.4YrCancerDerived_Inh	*	2.11E-08
18	ALL	UCART1	314350	3923250	0.000809	9901	DieselExhPM	2.11E-08	2.4YrCancerDerived_Inh	*	2.11E-08
416	ALL	UCART1	314850	3925450	0.000809	9901	DieselExhPM	2.11E-08	2.4YrCancerDerived_Inh	*	2.11E-08
384	ALL	UCART1	315450	3925150	0.000808	9901	DieselExhPM	2.10E-08	2.4YrCancerDerived_Inh	*	2.10E-08
369	ALL	UCART1	315650	3925050	0.000792	9901	DieselExhPM	2.06E-08	2.4YrCancerDerived_Inh	*	2.06E-08
410	ALL	UCART1	315250	3925350	0.000763	9901	DieselExhPM	1.99E-08	2.4YrCancerDerived_Inh	*	1.99E-08
310	ALL	UCART1	313650	3924850	0.000761	9901	DieselExhPM	1.98E-08	2.4YrCancerDerived_Inh	*	1.98E-08
409	ALL	UCART1	315150	3925350	0.000757	9901	DieselExhPM	1.97E-08	2.4YrCancerDerived_Inh	*	1.97E-08
150	ALL	UCART1	313750	3923950	0.000756	9901	DieselExhPM	1.97E-08	2.4YrCancerDerived_Inh	*	1.97E-08
35	ALL	UCART1	314250	3923350	0.000747	9901	DieselExhPM	1.95E-08	2.4YrCancerDerived_Inh	*	1.95E-08
417	ALL	UCART1	314950	3925450	0.000742	9901	DieselExhPM	1.93E-08	2.4YrCancerDerived_Inh	*	1.93E-08
288	ALL	UCART1	313650	3924750	0.000739	9901	DieselExhPM	1.93E-08	2.4YrCancerDerived_Inh	*	1.93E-08
385	ALL	UCART1	315550	3925150	0.000735	9901	DieselExhPM	1.91E-08	2.4YrCancerDerived_Inh	*	1.91E-08
149	ALL	UCART1	313650	3923950	0.000714	9901	DieselExhPM	1.86E-08	2.4YrCancerDerived_Inh	*	1.86E-08
210	ALL	UCART1	313750	3924350	0.000711	9901	DieselExhPM	1.85E-08	2.4YrCancerDerived_Inh	*	1.85E-08
269	ALL	UCART1	313650	3924650	0.00071	9901	DieselExhPM	1.85E-08	2.4YrCancerDerived_Inh	*	1.85E-08
411	ALL	UCART1	315350	3925350	0.000706	9901	DieselExhPM	1.84E-08	2.4YrCancerDerived_Inh	*	1.84E-08
418	ALL	UCART1	315050	3925450	0.0007	9901	DieselExhPM	1.82E-08	2.4YrCancerDerived_Inh	*	1.82E-08
399	ALL	UCART1	315450	3925250	0.000699	9901	DieselExhPM	1.82E-08	2.4YrCancerDerived_Inh	*	1.82E-08
181	ALL	UCART1	313850	3924150	0.000693	9901	DieselExhPM	1.81E-08	2.4YrCancerDerived_Inh	*	1.81E-08
419	ALL	UCART1	315150	3925450	0.000687	9901	DieselExhPM	1.79E-08	2.4YrCancerDerived_Inh	*	1.79E-08
95	ALL	UCART1	314050	3923650	0.000682	9901	DieselExhPM	1.77E-08	2.4YrCancerDerived_Inh	*	1.77E-08
4	ALL	UCART1	314350	3923150	0.000674	9901	DieselExhPM	1.75E-08	2.4YrCancerDerived_Inh	*	1.75E-08
132	ALL	UCART1	313850	3923850	0.00067	9901	DieselExhPM	1.74E-08	2.4YrCancerDerived_Inh	*	1.74E-08
53	ALL	UCART1	314150	3923450	0.000669	9901	DieselExhPM	1.74E-08	2.4YrCancerDerived_Inh	*	1.74E-08
249	ALL	UCART1	313650	3924550	0.000665	9901	DieselExhPM	1.73E-08	2.4YrCancerDerived_Inh	*	1.73E-08
420	ALL	UCART1	315250	3925450	0.000635	9901	DieselExhPM	1.65E-08	2.4YrCancerDerived_Inh	*	1.65E-08
17	ALL	UCART1	314250	3923250	0.000625	9901	DieselExhPM	1.63E-08	2.4YrCancerDerived_Inh	*	1.63E-08
148	ALL	UCART1	313550	3923950	0.000616	9901	DieselExhPM	1.60E-08	2.4YrCancerDerived_Inh	*	1.60E-08
229	ALL	UCART1	313650	3924450	0.000603	9901	DieselExhPM	1.57E-08	2.4YrCancerDerived_Inh	*	1.57E-08
195	ALL	UCART1	313750	3924250	0.000602	9901	DieselExhPM	1.57E-08	2.4YrCancerDerived_Inh	*	1.57E-08
287	ALL	UCART1	313550	3924750	0.000592	9901	DieselExhPM	1.54E-08	2.4YrCancerDerived_Inh	*	1.54E-08
73	ALL	UCART1	314050	3923550	0.000581	9901	DieselExhPM	1.51E-08	2.4YrCancerDerived_Inh	*	1.51E-08
114	ALL	UCART1	313950	3923750	0.00058	9901	DieselExhPM	1.51E-08	2.4YrCancerDerived_Inh	*	1.51E-08
166	ALL	UCART1	313850	3924050	0.00057	9901	DieselExhPM	1.48E-08	2.4YrCancerDerived_Inh	*	1.48E-08
131	ALL	UCART1	313750	3923850	0.000568	9901	DieselExhPM	1.48E-08	2.4YrCancerDerived_Inh	*	1.48E-08
34	ALL	UCART1	314150	3923350	0.000567	9901	DieselExhPM	1.48E-08	2.4YrCancerDerived_Inh	*	1.48E-08
268	ALL	UCART1	313550	3924650	0.000561	9901	DieselExhPM	1.46E-08	2.4YrCancerDerived_Inh	*	1.46E-08
147	ALL	UCART1	313450	3923950	0.000561	9901	DieselExhPM	1.46E-08	2.4YrCancerDerived_Inh	*	1.46E-08
3	ALL	UCART1	314250	3923150	0.000536	9901	DieselExhPM	1.40E-08	2.4YrCancerDerived_Inh	*	1.40E-08
209	ALL	UCART1	313650	3924350	0.00053	9901	DieselExhPM	1.38E-08	2.4YrCancerDerived_Inh	*	1.38E-08
248	ALL	UCART1	313550	3924550	0.00052	9901	DieselExhPM	1.35E-08	2.4YrCancerDerived_Inh	*	1.35E-08

*HARP - HRACalc v22118 4/16/2025 3:00:00 PM - Cancer Risk - Input File: F:\Jobs\59010001\ConHRA\HARPCON\hra\WkrCancer2.4YrHRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBREV	RISK_SUM	SCENARIO	DETAILS	INH_RISK
130	ALL	UCART1	313650	3923850	0.000499	9901	DieselExhPM	1.30E-08	2.4YrCancerDerived_Inh	*	1.30E-08
52	ALL	UCART1	314050	3923450	0.000496	9901	DieselExhPM	1.29E-08	2.4YrCancerDerived_Inh	*	1.29E-08
94	ALL	UCART1	313950	3923650	0.000495	9901	DieselExhPM	1.29E-08	2.4YrCancerDerived_Inh	*	1.29E-08
16	ALL	UCART1	314150	3923250	0.000489	9901	DieselExhPM	1.27E-08	2.4YrCancerDerived_Inh	*	1.27E-08
180	ALL	UCART1	313750	3924150	0.000489	9901	DieselExhPM	1.27E-08	2.4YrCancerDerived_Inh	*	1.27E-08
228	ALL	UCART1	313550	3924450	0.000472	9901	DieselExhPM	1.23E-08	2.4YrCancerDerived_Inh	*	1.23E-08
267	ALL	UCART1	313450	3924650	0.000461	9901	DieselExhPM	1.20E-08	2.4YrCancerDerived_Inh	*	1.20E-08
194	ALL	UCART1	313650	3924250	0.000447	9901	DieselExhPM	1.16E-08	2.4YrCancerDerived_Inh	*	1.16E-08
113	ALL	UCART1	313850	3923750	0.000438	9901	DieselExhPM	1.14E-08	2.4YrCancerDerived_Inh	*	1.14E-08
33	ALL	UCART1	314050	3923350	0.000436	9901	DieselExhPM	1.14E-08	2.4YrCancerDerived_Inh	*	1.14E-08
72	ALL	UCART1	313950	3923550	0.000435	9901	DieselExhPM	1.13E-08	2.4YrCancerDerived_Inh	*	1.13E-08
165	ALL	UCART1	313750	3924050	0.00043	9901	DieselExhPM	1.12E-08	2.4YrCancerDerived_Inh	*	1.12E-08
2	ALL	UCART1	314150	3923150	0.00043	9901	DieselExhPM	1.12E-08	2.4YrCancerDerived_Inh	*	1.12E-08
247	ALL	UCART1	313450	3924550	0.000426	9901	DieselExhPM	1.11E-08	2.4YrCancerDerived_Inh	*	1.11E-08
208	ALL	UCART1	313550	3924350	0.000413	9901	DieselExhPM	1.08E-08	2.4YrCancerDerived_Inh	*	1.08E-08
129	ALL	UCART1	313550	3923850	0.000402	9901	DieselExhPM	1.05E-08	2.4YrCancerDerived_Inh	*	1.05E-08
15	ALL	UCART1	314050	3923250	0.000386	9901	DieselExhPM	1.00E-08	2.4YrCancerDerived_Inh	*	1.00E-08
51	ALL	UCART1	313950	3923450	0.000385	9901	DieselExhPM	1.00E-08	2.4YrCancerDerived_Inh	*	1.00E-08
227	ALL	UCART1	313450	3924450	0.000383	9901	DieselExhPM	9.98E-09	2.4YrCancerDerived_Inh	*	9.98E-09
93	ALL	UCART1	313850	3923650	0.000377	9901	DieselExhPM	9.81E-09	2.4YrCancerDerived_Inh	*	9.81E-09
179	ALL	UCART1	313650	3924150	0.000372	9901	DieselExhPM	9.68E-09	2.4YrCancerDerived_Inh	*	9.68E-09
193	ALL	UCART1	313550	3924250	0.000351	9901	DieselExhPM	9.13E-09	2.4YrCancerDerived_Inh	*	9.13E-09
164	ALL	UCART1	313650	3924050	0.000347	9901	DieselExhPM	9.04E-09	2.4YrCancerDerived_Inh	*	9.04E-09
32	ALL	UCART1	313950	3923350	0.000345	9901	DieselExhPM	8.98E-09	2.4YrCancerDerived_Inh	*	8.98E-09
112	ALL	UCART1	313750	3923750	0.000345	9901	DieselExhPM	8.98E-09	2.4YrCancerDerived_Inh	*	8.98E-09
1	ALL	UCART1	314050	3923150	0.000344	9901	DieselExhPM	8.96E-09	2.4YrCancerDerived_Inh	*	8.96E-09
71	ALL	UCART1	313850	3923550	0.00034	9901	DieselExhPM	8.85E-09	2.4YrCancerDerived_Inh	*	8.85E-09
207	ALL	UCART1	313450	3924350	0.000334	9901	DieselExhPM	8.70E-09	2.4YrCancerDerived_Inh	*	8.70E-09
14	ALL	UCART1	313950	3923250	0.00031	9901	DieselExhPM	8.08E-09	2.4YrCancerDerived_Inh	*	8.08E-09
50	ALL	UCART1	313850	3923450	0.000307	9901	DieselExhPM	7.98E-09	2.4YrCancerDerived_Inh	*	7.98E-09
163	ALL	UCART1	313550	3924050	0.000296	9901	DieselExhPM	7.70E-09	2.4YrCancerDerived_Inh	*	7.70E-09
178	ALL	UCART1	313550	3924150	0.000294	9901	DieselExhPM	7.65E-09	2.4YrCancerDerived_Inh	*	7.65E-09
92	ALL	UCART1	313750	3923650	0.00029	9901	DieselExhPM	7.56E-09	2.4YrCancerDerived_Inh	*	7.56E-09
192	ALL	UCART1	313450	3924250	0.000285	9901	DieselExhPM	7.41E-09	2.4YrCancerDerived_Inh	*	7.41E-09
31	ALL	UCART1	313850	3923350	0.000279	9901	DieselExhPM	7.27E-09	2.4YrCancerDerived_Inh	*	7.27E-09
111	ALL	UCART1	313650	3923750	0.000272	9901	DieselExhPM	7.07E-09	2.4YrCancerDerived_Inh	*	7.07E-09
162	ALL	UCART1	313450	3924050	0.000268	9901	DieselExhPM	6.98E-09	2.4YrCancerDerived_Inh	*	6.98E-09
70	ALL	UCART1	313750	3923550	0.000267	9901	DieselExhPM	6.95E-09	2.4YrCancerDerived_Inh	*	6.95E-09
13	ALL	UCART1	313850	3923250	0.000254	9901	DieselExhPM	6.62E-09	2.4YrCancerDerived_Inh	*	6.62E-09
49	ALL	UCART1	313750	3923450	0.00025	9901	DieselExhPM	6.50E-09	2.4YrCancerDerived_Inh	*	6.50E-09
177	ALL	UCART1	313450	3924150	0.000245	9901	DieselExhPM	6.37E-09	2.4YrCancerDerived_Inh	*	6.37E-09
30	ALL	UCART1	313750	3923350	0.000232	9901	DieselExhPM	6.03E-09	2.4YrCancerDerived_Inh	*	6.03E-09
128	ALL	UCART1	313450	3923850	0.000228	9901	DieselExhPM	5.95E-09	2.4YrCancerDerived_Inh	*	5.95E-09
91	ALL	UCART1	313650	3923650	0.000221	9901	DieselExhPM	5.75E-09	2.4YrCancerDerived_Inh	*	5.75E-09
12	ALL	UCART1	313750	3923250	0.000214	9901	DieselExhPM	5.57E-09	2.4YrCancerDerived_Inh	*	5.57E-09
69	ALL	UCART1	313650	3923550	0.000207	9901	DieselExhPM	5.40E-09	2.4YrCancerDerived_Inh	*	5.40E-09
48	ALL	UCART1	313650	3923450	0.000202	9901	DieselExhPM	5.26E-09	2.4YrCancerDerived_Inh	*	5.26E-09
110	ALL	UCART1	313550	3923750	0.000202	9901	DieselExhPM	5.25E-09	2.4YrCancerDerived_Inh	*	5.25E-09
29	ALL	UCART1	313650	3923350	0.000194	9901	DieselExhPM	5.06E-09	2.4YrCancerDerived_Inh	*	5.06E-09
90	ALL	UCART1	313550	3923650	0.000167	9901	DieselExhPM	4.36E-09	2.4YrCancerDerived_Inh	*	4.36E-09
68	ALL	UCART1	313550	3923550	0.000163	9901	DieselExhPM	4.24E-09	2.4YrCancerDerived_Inh	*	4.24E-09
47	ALL	UCART1	313550	3923450	0.000161	9901	DieselExhPM	4.19E-09	2.4YrCancerDerived_Inh	*	4.19E-09
28	ALL	UCART1	313550	3923350	0.000161	9901	DieselExhPM	4.19E-09	2.4YrCancerDerived_Inh	*	4.19E-09
109	ALL	UCART1	313450	3923750	0.00014	9901	DieselExhPM	3.65E-09	2.4YrCancerDerived_Inh	*	3.65E-09
89	ALL	UCART1	313450	3923650	0.000129	9901	DieselExhPM	3.35E-09	2.4YrCancerDerived_Inh	*	3.35E-09
67	ALL	UCART1	313450	3923550	0.000128	9901	DieselExhPM	3.33E-09	2.4YrCancerDerived_Inh	*	3.33E-09

HARP Project Summary Report 10/29/2025 2:31:05 PM

PROJECT INFORMATION
HARP Version: 22118
Project Name: HARPOpsMIT1
Project Output Directory: F:\Jobs\59010001\OpHRA\HARPOpsMIT1
HARP Database: NA

FACILITY INFORMATION
Origin
X (m):0
Y (m):0
Zone:1
No. of Sources:0
No. of Buildings:0

EMISSION INVENTORY
No. of Pollutants:18
No. of Background Pollutants:0

Emissions

ScrID	StkID	ProID	PolID	PolAbbrev	Multi	Annual Ems (lbs/yr)	MaxHr Ems (lbs/hr)	MWAF
DOCK1	0	0	9901	DieselExhPM	1	0.32	0	1
DOCK2	0	0	9901	DieselExhPM	1	0.19	0	1
DOCK3	0	0	9901	DieselExhPM	1	0.18	0	1
DOCK4_NE	0	0	9901	DieselExhPM	1	0.28	0	1
DOCK4_NW	0	0	9901	DieselExhPM	1	0.28	0	1
DOCK4_SW	0	0	9901	DieselExhPM	1	0.28	0	1
DOCK4_SE	0	0	9901	DieselExhPM	1	0.28	0	1
ONSITE	0	0	9901	DieselExhPM	1	3.23	0	1
OFFSITE1	0	0	9901	DieselExhPM	1	4.79	0	1
OFFSITE2	0	0	9901	DieselExhPM	1	1.6	0	1
TRU4_SE	0	0	9901	DieselExhPM	1	29.49	0	1
TRU4_SW	0	0	9901	DieselExhPM	1	29.49	0	1
EGEN1	0	0	9901	DieselExhPM	1	0.724	0	1
EGEN2	0	0	9901	DieselExhPM	1	0.724	0	1
EGEN3	0	0	9901	DieselExhPM	1	0.724	0	1
EGEN4-1	0	0	9901	DieselExhPM	1	0.724	0	1
EGEN4-2	0	0	9901	DieselExhPM	1	0.724	0	1
EGEN4-3	0	0	9901	DieselExhPM	1	4.748	0	1

Background

PolID	PolAbbrev	Conc (ug/m^3)	MWAF

Ground level concentration files (\glc\)

9901MAXHR.txt
9901PER.txt

POLLUTANT HEALTH INFORMATION
Health Database: C:\HARP2\Tables\HEALTH17320.mdb
Health Table Version: HEALTH25268
Official: True

PolID	PolAbbrev	InhCancer	OralCancer	AcuteREL	InhChronicREL	OralChronicREL	InhChronic8HRREL
9901	DieselExhPM	1.1			5		

HARP2 - HRACalc (dated 22118) 10/29/2025 2:30:21 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: Cancer
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 70

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 2
2<9 Years Bin: 0
2<16 Years Bin: 14
16<30 Years Bin: 0
16 to 70 Years Bin: 54

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used

Inhalation: True
Soil: False
Dermal: False
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****
TIER 2 SETTINGS
Tier2 not used.

****

Calculating cancer risk

```
Cancer risk breakdown by pollutant and receptor saved to: F:\Jobs\59010001\OpHRA\HARPOpsMIT1\hra\Reside
Cancer risk total by receptor saved to: F:\Jobs\59010001\OpHRA\HARPOpsMIT1\hra\Residential_MitigatedCan
HRA ran successfully
```

Airport Commerce Center Industrial Project
Health Risk Summary of HARP2 Results
Mitigated Residntial Exposure—DPM

Maximum Risk			MAXHI NonCancer Chronic	MAXHI Acute
	5.23E-06	5.2324	0.00100	0

Maximally Exposed Individual Receptor	X	Y
MEIR UTM	314959	3923771
Receptor #	441	

HARP File Name
*HARP - HRACalc v22118 10/29/2025 2:30:21 PM - Cancer Risk - Input File: F:\Jobs\59010001\OpHRA\HARPOpsMIT1\hra\Residential_MitigatedHRAInput.hra

REC	GRP	NETID	X	Y	CONC	RISK_SUM	SCENARIO	MAXHI
421	ALL	RES	315087	3923842	0.0029	3.0768E-06	70YrCancerDerived_Inh	5.86E-04
422	ALL	RES	315087	3923817	0.0030	0.000003126	70YrCancerDerived_Inh	5.96E-04
423	ALL	RES	315108	3923839	0.0027	0.000002879	70YrCancerDerived_Inh	5.49E-04
424	ALL	RES	315106	3923815	0.0028	0.000002945	70YrCancerDerived_Inh	5.61E-04
425	ALL	RES	315175	3923920	0.0021	2.2337E-06	70YrCancerDerived_Inh	4.26E-04
426	ALL	RES	315215	3923917	0.0019	0.000002037	70YrCancerDerived_Inh	3.88E-04
427	ALL	RES	315258	3923917	0.0018	1.8689E-06	70YrCancerDerived_Inh	3.56E-04
428	ALL	RES	315295	3923916	0.0016	1.6928E-06	70YrCancerDerived_Inh	3.23E-04
429	ALL	RES	315168	3923847	0.0023	2.3771E-06	70YrCancerDerived_Inh	4.53E-04
430	ALL	RES	315190	3923847	0.0021	2.2363E-06	70YrCancerDerived_Inh	4.26E-04
431	ALL	RES	315222	3923845	0.0020	2.0593E-06	70YrCancerDerived_Inh	3.92E-04
432	ALL	RES	315164	3923825	0.0023	2.4628E-06	70YrCancerDerived_Inh	4.69E-04
433	ALL	RES	315192	3923827	0.0022	2.2827E-06	70YrCancerDerived_Inh	4.35E-04
434	ALL	RES	315245	3923844	0.0019	1.9633E-06	70YrCancerDerived_Inh	3.74E-04
435	ALL	RES	315164	3923806	0.0024	2.4988E-06	70YrCancerDerived_Inh	4.76E-04
436	ALL	RES	315190	3923808	0.0022	2.3368E-06	70YrCancerDerived_Inh	4.45E-04
437	ALL	RES	315222	3923826	0.0020	2.1186E-06	70YrCancerDerived_Inh	4.04E-04
438	ALL	RES	315189	3923787	0.0022	2.3576E-06	70YrCancerDerived_Inh	4.49E-04
439	ALL	RES	315243	3923824	0.0019	2.0288E-06	70YrCancerDerived_Inh	3.87E-04
440	ALL	RES	315162	3923784	0.0024	2.5368E-06	70YrCancerDerived_Inh	4.83E-04
441	ALL	RES	314959	3923771	0.0050	5.2324E-06	70YrCancerDerived_Inh	9.97E-04
442	ALL	RES	314988	3923770	0.0045	4.7218E-06	70YrCancerDerived_Inh	9.00E-04
443	ALL	RES	314962	3923753	0.0049	0.000005106	70YrCancerDerived_Inh	9.73E-04
444	ALL	RES	314988	3923749	0.0045	4.6725E-06	70YrCancerDerived_Inh	8.90E-04
445	ALL	RES	314959	3923730	0.0048	0.000005071	70YrCancerDerived_Inh	9.66E-04
446	ALL	RES	314988	3923730	0.0044	4.6108E-06	70YrCancerDerived_Inh	8.79E-04
447	ALL	RES	314958	3923714	0.0048	5.0533E-06	70YrCancerDerived_Inh	9.63E-04
448	ALL	RES	314986	3923712	0.0044	4.6388E-06	70YrCancerDerived_Inh	8.84E-04
449	ALL	RES	314958	3923690	0.0047	4.9591E-06	70YrCancerDerived_Inh	9.45E-04
450	ALL	RES	314985	3923689	0.0044	4.6141E-06	70YrCancerDerived_Inh	8.79E-04
451	ALL	RES	314959	3923672	0.0047	4.9108E-06	70YrCancerDerived_Inh	9.36E-04
452	ALL	RES	314987	3923674	0.0043	0.00000454	70YrCancerDerived_Inh	8.65E-04
453	ALL	RES	314959	3923652	0.0046	4.8454E-06	70YrCancerDerived_Inh	9.23E-04
454	ALL	RES	314984	3923651	0.0043	4.5609E-06	70YrCancerDerived_Inh	8.69E-04
455	ALL	RES	314959	3923633	0.0046	4.8255E-06	70YrCancerDerived_Inh	9.20E-04
456	ALL	RES	314984	3923632	0.0043	4.5174E-06	70YrCancerDerived_Inh	8.61E-04
457	ALL	RES	314961	3923610	0.0045	4.7637E-06	70YrCancerDerived_Inh	9.08E-04
458	ALL	RES	314984	3923610	0.0043	4.5137E-06	70YrCancerDerived_Inh	8.60E-04
459	ALL	RES	315048	3923768	0.0036	3.7602E-06	70YrCancerDerived_Inh	7.17E-04
460	ALL	RES	315075	3923767	0.0033	3.4258E-06	70YrCancerDerived_Inh	6.53E-04
461	ALL	RES	315099	3923765	0.0030	3.1495E-06	70YrCancerDerived_Inh	6.00E-04
462	ALL	RES	315049	3923749	0.0036	3.7977E-06	70YrCancerDerived_Inh	7.24E-04
463	ALL	RES	315073	3923747	0.0033	3.5052E-06	70YrCancerDerived_Inh	6.68E-04
464	ALL	RES	315097	3923746	0.0031	3.2395E-06	70YrCancerDerived_Inh	6.17E-04
465	ALL	RES	315044	3923727	0.0037	3.8657E-06	70YrCancerDerived_Inh	7.37E-04
466	ALL	RES	315070	3923726	0.0034	3.5633E-06	70YrCancerDerived_Inh	6.79E-04
467	ALL	RES	315097	3923725	0.0031	3.2688E-06	70YrCancerDerived_Inh	6.23E-04
468	ALL	RES	315046	3923710	0.0037	3.8313E-06	70YrCancerDerived_Inh	7.30E-04
469	ALL	RES	315073	3923710	0.0034	3.5418E-06	70YrCancerDerived_Inh	6.75E-04
470	ALL	RES	315098	3923710	0.0031	3.2767E-06	70YrCancerDerived_Inh	6.24E-04
471	ALL	RES	315045	3923686	0.0037	3.8783E-06	70YrCancerDerived_Inh	7.39E-04
472	ALL	RES	315071	3923687	0.0034	0.000003579	70YrCancerDerived_Inh	6.82E-04
473	ALL	RES	315096	3923686	0.0031	3.3019E-06	70YrCancerDerived_Inh	6.29E-04
474	ALL	RES	315044	3923669	0.0037	3.8875E-06	70YrCancerDerived_Inh	7.41E-04
475	ALL	RES	315071	3923669	0.0034	3.6069E-06	70YrCancerDerived_Inh	6.87E-04
476	ALL	RES	315103	3923668	0.0031	3.2882E-06	70YrCancerDerived_Inh	6.27E-04
477	ALL	RES	315044	3923646	0.0037	3.8635E-06	70YrCancerDerived_Inh	7.36E-04
478	ALL	RES	315071	3923647	0.0034	3.6064E-06	70YrCancerDerived_Inh	6.87E-04
479	ALL	RES	315099	3923647	0.0032	3.3504E-06	70YrCancerDerived_Inh	6.38E-04
480	ALL	RES	315043	3923628	0.0037	3.8849E-06	70YrCancerDerived_Inh	7.40E-04
481	ALL	RES	315069	3923628	0.0034	3.6174E-06	70YrCancerDerived_Inh	6.89E-04
482	ALL	RES	315103	3923627	0.0032	3.3226E-06	70YrCancerDerived_Inh	6.33E-04
483	ALL	RES	315042	3923608	0.0037	3.8887E-06	70YrCancerDerived_Inh	7.41E-04
484	ALL	RES	315068	3923608	0.0035	3.6487E-06	70YrCancerDerived_Inh	6.95E-04
485	ALL	RES	315101	3923607	0.0032	0.00000335	70YrCancerDerived_Inh	6.38E-04
486	ALL	RES	315161	3923766	0.0025	2.5845E-06	70YrCancerDerived_Inh	4.92E-04
487	ALL	RES	315184	3923767	0.0023	2.4369E-06	70YrCancerDerived_Inh	4.64E-04
488	ALL	RES	315160	3923744	0.0026	2.6775E-06	70YrCancerDerived_Inh	5.10E-04
489	ALL	RES	315186	3923745	0.0024	2.4825E-06	70YrCancerDerived_Inh	4.73E-04
490	ALL	RES	315159	3923725	0.0026	0.000002739	70YrCancerDerived_Inh	5.22E-04
491	ALL	RES	315185	3923728	0.0024	2.5492E-06	70YrCancerDerived_Inh	4.86E-04
492	ALL	RES	315160	3923707	0.0026	2.7594E-06	70YrCancerDerived_Inh	5.26E-04
493	ALL	RES	315181	3923707	0.0025	2.6151E-06	70YrCancerDerived_Inh	4.98E-04
494	ALL	RES	315160	3923690	0.0026	0.000002776	70YrCancerDerived_Inh	5.29E-04
495	ALL	RES	315188	3923685	0.0025	2.5989E-06	70YrCancerDerived_Inh	4.95E-04
496	ALL	RES	315159	3923668	0.0026	2.7784E-06	70YrCancerDerived_Inh	5.29E-04
497	ALL	RES	315188	3923667	0.0025	0.000002592	70YrCancerDerived_Inh	4.94E-04
498	ALL	RES	315157	3923650	0.0027	2.8508E-06	70YrCancerDerived_Inh	5.43E-04
499	ALL	RES	315223	3923806	0.0021	2.1544E-06	70YrCancerDerived_Inh	4.11E-04
500	ALL	RES	315246	3923805	0.0020	2.0522E-06	70YrCancerDerived_Inh	3.91E-04
501	ALL	RES	315225	3923787	0.0021	0.00000216	70YrCancerDerived_Inh	4.12E-04
502	ALL	RES	315247	3923787	0.0020	2.0657E-06	70YrCancerDerived_Inh	3.94E-04
503	ALL	RES	315224	3923771	0.0021	2.1919E-06	70YrCancerDerived_Inh	4.18E-04
504	ALL	RES	315246	3923770	0.0020	2.0901E-06	70YrCancerDerived_Inh	3.98E-04
505	ALL	RES	315223	3923752	0.0021	2.2282E-06	70YrCancerDerived_Inh	4.25E-04
506	ALL	RES	315246	3923752	0.0020	2.1247E-06	70YrCancerDerived_Inh	4.05E-04
507	ALL	RES	315225	3923735	0.0022	0.000002272	70YrCancerDerived_Inh	4.33E-04
508	ALL	RES	315244	3923735	0.0021	2.1688E-06	70YrCancerDerived_Inh	4.13E-04
509	ALL	RES	315223	3923713	0.0022	0.000002341	70YrCancerDerived_Inh	4.46E-04
510	ALL	RES	315243	3923714	0.0021	2.2334E-06	70YrCancerDerived_Inh	4.26E-04

HARP File Name

*HARP - HRACalc v22118 10/29/2025 2:30:21 PM - Cancer Risk - Input File: F:\Jobs\59010001\OpHRA\HARPOpsMIT1\hra\Residential_MitigatedHRAInput.hra

REC	GRP	NETID	X	Y	CONC	RISK_SUM	SCENARIO	MAXHI
511	ALL	RES	315220	3923697	0.0023	2.3849E-06	70YrCancerDerived_Inh	4.54E-04
512	ALL	RES	315327	3923924	0.0015	1.6084E-06	70YrCancerDerived_Inh	3.06E-04
513	ALL	RES	315320	3923947	0.0016	1.6475E-06	70YrCancerDerived_Inh	3.14E-04
514	ALL	RES	315329	3923971	0.0015	1.6117E-06	70YrCancerDerived_Inh	3.07E-04
515	ALL	RES	315324	3923988	0.0015	1.6045E-06	70YrCancerDerived_Inh	3.06E-04
516	ALL	RES	315328	3924010	0.0015	1.5529E-06	70YrCancerDerived_Inh	2.96E-04
517	ALL	RES	315327	3924030	0.0015	1.5574E-06	70YrCancerDerived_Inh	2.97E-04
518	ALL	RES	315334	3924045	0.0015	1.5292E-06	70YrCancerDerived_Inh	2.91E-04
519	ALL	RES	315332	3924059	0.0014	1.5079E-06	70YrCancerDerived_Inh	2.87E-04
520	ALL	RES	315332	3924082	0.0014	1.4539E-06	70YrCancerDerived_Inh	2.77E-04
521	ALL	RES	315332	3924098	0.0014	1.4188E-06	70YrCancerDerived_Inh	2.70E-04
522	ALL	RES	315334	3924124	0.0013	1.3301E-06	70YrCancerDerived_Inh	2.53E-04
523	ALL	RES	315335	3924135	0.0012	1.2827E-06	70YrCancerDerived_Inh	2.44E-04
524	ALL	RES	315337	3924160	0.0011	1.1853E-06	70YrCancerDerived_Inh	2.26E-04
525	ALL	RES	315336	3924169	0.0011	1.1825E-06	70YrCancerDerived_Inh	2.25E-04
526	ALL	RES	315335	3924193	0.0012	1.2108E-06	70YrCancerDerived_Inh	2.31E-04
527	ALL	RES	315332	3924216	0.0012	1.2171E-06	70YrCancerDerived_Inh	2.32E-04
528	ALL	RES	315337	3924229	0.0011	0.0000012	70YrCancerDerived_Inh	2.29E-04
529	ALL	RES	315339	3924245	0.0011	1.1744E-06	70YrCancerDerived_Inh	2.24E-04
530	ALL	RES	315338	3924237	0.0011	1.1888E-06	70YrCancerDerived_Inh	2.27E-04
531	ALL	RES	315336	3924251	0.0011	1.1654E-06	70YrCancerDerived_Inh	2.22E-04
532	ALL	RES	315338	3924270	0.0011	1.1146E-06	70YrCancerDerived_Inh	2.12E-04
533	ALL	RES	315338	3924291	0.0010	1.0991E-06	70YrCancerDerived_Inh	2.09E-04
534	ALL	RES	315346	3924327	0.0010	1.0588E-06	70YrCancerDerived_Inh	2.02E-04
535	ALL	RES	315340	3924344	0.0010	1.0252E-06	70YrCancerDerived_Inh	1.95E-04
536	ALL	RES	315340	3924369	0.0009	9.9251E-07	70YrCancerDerived_Inh	1.89E-04
537	ALL	RES	315343	3924385	0.0010	1.0007E-06	70YrCancerDerived_Inh	1.91E-04
538	ALL	RES	315344	3924408	0.0009	9.9707E-07	70YrCancerDerived_Inh	1.90E-04
539	ALL	RES	315346	3924424	0.0009	9.7966E-07	70YrCancerDerived_Inh	1.87E-04
540	ALL	RES	315346	3924466	0.0009	9.3632E-07	70YrCancerDerived_Inh	1.78E-04
541	ALL	RES	315349	3924479	0.0009	9.3576E-07	70YrCancerDerived_Inh	1.78E-04
542	ALL	RES	315352	3924503	0.0009	9.2237E-07	70YrCancerDerived_Inh	1.76E-04
543	ALL	RES	315350	3924518	0.0009	9.1814E-07	70YrCancerDerived_Inh	1.75E-04
544	ALL	RES	315355	3924540	0.0009	9.0881E-07	70YrCancerDerived_Inh	1.73E-04
545	ALL	RES	315356	3924578	0.0008	8.5965E-07	70YrCancerDerived_Inh	1.64E-04

HARP Project Summary Report 10/29/2025 2:32:58 PM

PROJECT INFORMATION
HARP Version: 22118
Project Name: HARPOpsUNMIT1
Project Output Directory: F:\Jobs\59010001\OpHRA\HARPOpsUNMIT1
HARP Database: NA

FACILITY INFORMATION
Origin
X (m):0
Y (m):0
Zone:1
No. of Sources:0
No. of Buildings:0

EMISSION INVENTORY
No. of Pollutants:18
No. of Background Pollutants:0

Emissions

ScrID	StkID	ProID	PolID	PolAbbrev	Multi	Annual Ems (lbs/yr)	MaxHr Ems (lbs/hr)	MWAF
DOCK1	0	0	9901	DieselExhPM	1	0.32	0	1
DOCK2	0	0	9901	DieselExhPM	1	0.19	0	1
DOCK3	0	0	9901	DieselExhPM	1	0.18	0	1
DOCK4_NE	0	0	9901	DieselExhPM	1	0.28	0	1
DOCK4_NW	0	0	9901	DieselExhPM	1	0.28	0	1
DOCK4_SW	0	0	9901	DieselExhPM	1	0.28	0	1
DOCK4_SE	0	0	9901	DieselExhPM	1	0.28	0	1
ONSITE	0	0	9901	DieselExhPM	1	3.23	0	1
OFFSITE1	0	0	9901	DieselExhPM	1	4.79	0	1
OFFSITE2	0	0	9901	DieselExhPM	1	1.6	0	1
TRU4_SE	0	0	9901	DieselExhPM	1	67.47	0	1
TRU4_SW	0	0	9901	DieselExhPM	1	67.47	0	1
EGEN1	0	0	9901	DieselExhPM	1	0.724	0	1
EGEN2	0	0	9901	DieselExhPM	1	0.724	0	1
EGEN3	0	0	9901	DieselExhPM	1	0.724	0	1
EGEN4-1	0	0	9901	DieselExhPM	1	0.724	0	1
EGEN4-2	0	0	9901	DieselExhPM	1	0.724	0	1
EGEN4-3	0	0	9901	DieselExhPM	1	4.748	0	1

Background

PolID	PolAbbrev	Conc (ug/m^3)	MWAF

Ground level concentration files (\glc\)

9901MAXHR.txt
9901PER.txt

POLLUTANT HEALTH INFORMATION
Health Database: C:\HARP2\Tables\HEALTH17320.mdb
Health Table Version: HEALTH25268
Official: True

PolID	PolAbbrev	InhCancer	OralCancer	AcuteREL	InhChronicREL	OralChronicREL	InhChronic8HRREL
9901	DieselExhPM	1.1			5		

HARP2 - HRACalc (dated 22118) 10/29/2025 2:22:49 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: Cancer
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 70

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 2
2<9 Years Bin: 0
2<16 Years Bin: 14
16<30 Years Bin: 0
16 to 70 Years Bin: 54

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: False
Dermal: False
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****
TIER 2 SETTINGS
Tier2 not used.

****

Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: F:\Jobs\59010001\OpHRA\HARPOpsUNMIT1\hra\Residential_UnmitCancerRisk.csv
Cancer risk total by receptor saved to: F:\Jobs\59010001\OpHRA\HARPOpsUNMIT1\hra\Residential_UnmitCancerRiskSumByRec.csv
HRA ran successfully

Airport Commerce Center Industrial Project

Health Risk Summary of HARP2 Results

Operations - Unmitigated Residential Exposure—DPM

Maximum Risk			MAXHI NonCancer Chronic	MAXHI Acute
	8.88E-06	8.875	0.00169	0

Maximally Exposed Individual Receptor	X	Y
MEIR UTM	314958	3923714
Receptor #	447	

HARP File Name

*HARP - HRACalc v22118 10/29/2025 2:22:49 PM - Cancer Risk - Input File: F:\Jobs\59010001\OpHRA\HARPOpsUNMIT1\hra\Residential_UnmitHRAInput.hra

REC	GRP	NETID	X	Y	CONC	RISK_SUM	SCENARIO	MAXHI
421	ALL	RES	315087	3923842	0.0046	4.8063E-06	70YrCancerDerived_Inh	9.16E-04
422	ALL	RES	315087	3923817	0.0047	0.000004957	70YrCancerDerived_Inh	9.45E-04
423	ALL	RES	315108	3923839	0.0043	4.5046E-06	70YrCancerDerived_Inh	8.58E-04
424	ALL	RES	315106	3923815	0.0045	4.6708E-06	70YrCancerDerived_Inh	8.90E-04
425	ALL	RES	315175	3923920	0.0033	3.4286E-06	70YrCancerDerived_Inh	6.53E-04
426	ALL	RES	315215	3923917	0.0030	3.1316E-06	70YrCancerDerived_Inh	5.97E-04
427	ALL	RES	315258	3923917	0.0027	2.8692E-06	70YrCancerDerived_Inh	5.47E-04
428	ALL	RES	315295	3923916	0.0024	2.5612E-06	70YrCancerDerived_Inh	4.88E-04
429	ALL	RES	315168	3923847	0.0035	3.6898E-06	70YrCancerDerived_Inh	7.03E-04
430	ALL	RES	315190	3923847	0.0033	3.4688E-06	70YrCancerDerived_Inh	6.61E-04
431	ALL	RES	315222	3923845	0.0030	3.1874E-06	70YrCancerDerived_Inh	6.07E-04
432	ALL	RES	315164	3923825	0.0037	3.8453E-06	70YrCancerDerived_Inh	7.33E-04
433	ALL	RES	315192	3923827	0.0034	3.5518E-06	70YrCancerDerived_Inh	6.77E-04
434	ALL	RES	315245	3923844	0.0029	3.0361E-06	70YrCancerDerived_Inh	5.79E-04
435	ALL	RES	315164	3923806	0.0038	3.9436E-06	70YrCancerDerived_Inh	7.51E-04
436	ALL	RES	315190	3923808	0.0035	3.6688E-06	70YrCancerDerived_Inh	6.99E-04
437	ALL	RES	315222	3923826	0.0031	3.2863E-06	70YrCancerDerived_Inh	6.26E-04
438	ALL	RES	315189	3923787	0.0036	3.7474E-06	70YrCancerDerived_Inh	7.14E-04
439	ALL	RES	315243	3923824	0.0030	3.1452E-06	70YrCancerDerived_Inh	5.99E-04
440	ALL	RES	315162	3923784	0.0039	4.0482E-06	70YrCancerDerived_Inh	7.71E-04
441	ALL	RES	314959	3923771	0.0084	8.7823E-06	70YrCancerDerived_Inh	1.67E-03
442	ALL	RES	314988	3923770	0.0075	0.000007828	70YrCancerDerived_Inh	1.49E-03
443	ALL	RES	314962	3923753	0.0083	8.7104E-06	70YrCancerDerived_Inh	1.66E-03
444	ALL	RES	314988	3923749	0.0075	7.9042E-06	70YrCancerDerived_Inh	1.51E-03
445	ALL	RES	314959	3923730	0.0084	8.8181E-06	70YrCancerDerived_Inh	1.68E-03
446	ALL	RES	314988	3923730	0.0076	7.9349E-06	70YrCancerDerived_Inh	1.51E-03
447	**ALL**	**RES**	**314958**	**3923714**	**0.0085**	**0.000008875**	**70YrCancerDerived_Inh**	**1.69E-03**
448	ALL	RES	314986	3923712	0.0077	8.0657E-06	70YrCancerDerived_Inh	1.54E-03
449	ALL	RES	314958	3923690	0.0084	8.8266E-06	70YrCancerDerived_Inh	1.68E-03
450	ALL	RES	314985	3923689	0.0077	8.1242E-06	70YrCancerDerived_Inh	1.55E-03
451	ALL	RES	314959	3923672	0.0084	8.7986E-06	70YrCancerDerived_Inh	1.68E-03
452	ALL	RES	314987	3923674	0.0077	8.0613E-06	70YrCancerDerived_Inh	1.54E-03
453	ALL	RES	314959	3923652	0.0083	8.7347E-06	70YrCancerDerived_Inh	1.66E-03
454	ALL	RES	314984	3923651	0.0078	8.1551E-06	70YrCancerDerived_Inh	1.55E-03
455	ALL	RES	314959	3923633	0.0083	8.7202E-06	70YrCancerDerived_Inh	1.66E-03
456	ALL	RES	314984	3923632	0.0077	8.1224E-06	70YrCancerDerived_Inh	1.55E-03
457	ALL	RES	314961	3923610	0.0082	8.6298E-06	70YrCancerDerived_Inh	1.64E-03
458	ALL	RES	314984	3923610	0.0077	8.1325E-06	70YrCancerDerived_Inh	1.55E-03
459	ALL	RES	315048	3923768	0.0059	6.1456E-06	70YrCancerDerived_Inh	1.17E-03
460	ALL	RES	315075	3923767	0.0053	5.5745E-06	70YrCancerDerived_Inh	1.06E-03
461	ALL	RES	315099	3923765	0.0049	0.000005107	70YrCancerDerived_Inh	9.73E-04
462	ALL	RES	315049	3923749	0.0060	6.2954E-06	70YrCancerDerived_Inh	1.20E-03
463	ALL	RES	315073	3923747	0.0055	5.7811E-06	70YrCancerDerived_Inh	1.10E-03
464	ALL	RES	315097	3923746	0.0051	5.3015E-06	70YrCancerDerived_Inh	1.01E-03
465	ALL	RES	315044	3923727	0.0062	6.5212E-06	70YrCancerDerived_Inh	1.24E-03
466	ALL	RES	315070	3923726	0.0057	5.9634E-06	70YrCancerDerived_Inh	1.14E-03
467	ALL	RES	315097	3923725	0.0052	5.4116E-06	70YrCancerDerived_Inh	1.03E-03
468	ALL	RES	315046	3923710	0.0062	6.5532E-06	70YrCancerDerived_Inh	1.25E-03
469	ALL	RES	315073	3923710	0.0057	5.9964E-06	70YrCancerDerived_Inh	1.14E-03
470	ALL	RES	315098	3923710	0.0052	5.4835E-06	70YrCancerDerived_Inh	1.04E-03
471	ALL	RES	315045	3923686	0.0064	6.6933E-06	70YrCancerDerived_Inh	1.28E-03
472	ALL	RES	315071	3923687	0.0058	6.1309E-06	70YrCancerDerived_Inh	1.17E-03
473	ALL	RES	315096	3923686	0.0053	5.6151E-06	70YrCancerDerived_Inh	1.07E-03
474	ALL	RES	315044	3923669	0.0064	6.7657E-06	70YrCancerDerived_Inh	1.29E-03
475	ALL	RES	315071	3923669	0.0059	6.2211E-06	70YrCancerDerived_Inh	1.19E-03
476	ALL	RES	315103	3923668	0.0054	0.000005618	70YrCancerDerived_Inh	1.07E-03
477	ALL	RES	315044	3923646	0.0065	6.8077E-06	70YrCancerDerived_Inh	1.30E-03
478	ALL	RES	315071	3923647	0.0060	6.2825E-06	70YrCancerDerived_Inh	1.20E-03
479	ALL	RES	315099	3923647	0.0055	5.7732E-06	70YrCancerDerived_Inh	1.10E-03
480	ALL	RES	315043	3923628	0.0065	6.8744E-06	70YrCancerDerived_Inh	1.31E-03
481	ALL	RES	315069	3923628	0.0061	6.3622E-06	70YrCancerDerived_Inh	1.21E-03
482	ALL	RES	315103	3923627	0.0055	5.7834E-06	70YrCancerDerived_Inh	1.10E-03
483	ALL	RES	315042	3923608	0.0066	6.9198E-06	70YrCancerDerived_Inh	1.32E-03
484	ALL	RES	315068	3923608	0.0061	6.4435E-06	70YrCancerDerived_Inh	1.23E-03
485	ALL	RES	315101	3923607	0.0056	5.8715E-06	70YrCancerDerived_Inh	1.12E-03
486	ALL	RES	315161	3923766	0.0040	0.000004164	70YrCancerDerived_Inh	7.93E-04
487	ALL	RES	315184	3923767	0.0037	3.9088E-06	70YrCancerDerived_Inh	7.45E-04
488	ALL	RES	315160	3923744	0.0041	0.00000433	70YrCancerDerived_Inh	8.25E-04
489	ALL	RES	315186	3923745	0.0038	3.9993E-06	70YrCancerDerived_Inh	7.62E-04
490	ALL	RES	315159	3923725	0.0043	4.4638E-06	70YrCancerDerived_Inh	8.51E-04
491	ALL	RES	315185	3923728	0.0039	4.1289E-06	70YrCancerDerived_Inh	7.87E-04
492	ALL	RES	315160	3923707	0.0043	0.000004536	70YrCancerDerived_Inh	8.64E-04
493	ALL	RES	315181	3923707	0.0041	4.2732E-06	70YrCancerDerived_Inh	8.14E-04
494	ALL	RES	315160	3923690	0.0044	4.6121E-06	70YrCancerDerived_Inh	8.79E-04
495	ALL	RES	315188	3923685	0.0041	4.2959E-06	70YrCancerDerived_Inh	8.19E-04
496	ALL	RES	315159	3923668	0.0045	4.6882E-06	70YrCancerDerived_Inh	8.93E-04
497	ALL	RES	315188	3923667	0.0041	4.3321E-06	70YrCancerDerived_Inh	8.26E-04
498	ALL	RES	315157	3923650	0.0046	4.8366E-06	70YrCancerDerived_Inh	9.22E-04
499	ALL	RES	315223	3923806	0.0032	3.3647E-06	70YrCancerDerived_Inh	6.41E-04
500	ALL	RES	315246	3923805	0.0030	3.1992E-06	70YrCancerDerived_Inh	6.10E-04
501	ALL	RES	315225	3923787	0.0032	3.4085E-06	70YrCancerDerived_Inh	6.50E-04
502	ALL	RES	315247	3923787	0.0031	3.2483E-06	70YrCancerDerived_Inh	6.19E-04
503	ALL	RES	315224	3923771	0.0033	3.4839E-06	70YrCancerDerived_Inh	6.64E-04
504	ALL	RES	315246	3923770	0.0032	3.3177E-06	70YrCancerDerived_Inh	6.32E-04
505	ALL	RES	315223	3923752	0.0034	0.000003571	70YrCancerDerived_Inh	6.80E-04
506	ALL	RES	315246	3923752	0.0032	0.000003395	70YrCancerDerived_Inh	6.47E-04
507	ALL	RES	315225	3923735	0.0035	3.6487E-06	70YrCancerDerived_Inh	6.95E-04
508	ALL	RES	315244	3923735	0.0033	3.4806E-06	70YrCancerDerived_Inh	6.63E-04
509	ALL	RES	315223	3923713	0.0036	3.7767E-06	70YrCancerDerived_Inh	7.20E-04
510	ALL	RES	315243	3923714	0.0034	3.5931E-06	70YrCancerDerived_Inh	6.85E-04

HARP Project Summary Report 10/29/2025 2:31:05 PM

PROJECT INFORMATION
HARP Version: 22118
Project Name: HARPOpsMIT1
Project Output Directory: F:\Jobs\59010001\OpHRA\HARPOpsMIT1
HARP Database: NA

FACILITY INFORMATION
Origin
X (m):0
Y (m):0
Zone:1
No. of Sources:0
No. of Buildings:0

EMISSION INVENTORY
No. of Pollutants:18
No. of Background Pollutants:0

Emissions

ScrID	StkID	ProID	PolID	PolAbbrev	Multi	Annual Ems (lbs/yr)	MaxHr Ems (lbs/hr)	MWAF
DOCK1	0	0	9901	DieselExhPM	1	0.32	0	1
DOCK2	0	0	9901	DieselExhPM	1	0.19	0	1
DOCK3	0	0	9901	DieselExhPM	1	0.18	0	1
DOCK4_NE	0	0	9901	DieselExhPM	1	0.28	0	1
DOCK4_NW	0	0	9901	DieselExhPM	1	0.28	0	1
DOCK4_SW	0	0	9901	DieselExhPM	1	0.28	0	1
DOCK4_SE	0	0	9901	DieselExhPM	1	0.28	0	1
ONSITE	0	0	9901	DieselExhPM	1	3.23	0	1
OFFSITE1	0	0	9901	DieselExhPM	1	4.79	0	1
OFFSITE2	0	0	9901	DieselExhPM	1	1.6	0	1
TRU4_SE	0	0	9901	DieselExhPM	1	29.49	0	1
TRU4_SW	0	0	9901	DieselExhPM	1	29.49	0	1
EGEN1	0	0	9901	DieselExhPM	1	0.724	0	1
EGEN2	0	0	9901	DieselExhPM	1	0.724	0	1
EGEN3	0	0	9901	DieselExhPM	1	0.724	0	1
EGEN4-1	0	0	9901	DieselExhPM	1	0.724	0	1
EGEN4-2	0	0	9901	DieselExhPM	1	0.724	0	1
EGEN4-3	0	0	9901	DieselExhPM	1	4.748	0	1

Background

PolID	PolAbbrev	Conc (ug/m^3)	MWAF

Ground level concentration files (\glc\)

9901MAXHR.txt
9901PER.txt

POLLUTANT HEALTH INFORMATION
Health Database: C:\HARP2\Tables\HEALTH17320.mdb
Health Table Version: HEALTH25268
Official: True

PolID	PolAbbrev	InhCancer	OralCancer	AcuteREL	InhChronicREL	OralChronicREL	InhChronic8HRREL
9901	DieselExhPM	1.1			5		

HARP2 - HRACalc (dated 22118) 10/29/2025 2:30:41 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Worker
Scenario: Cancer
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 16
Total Exposure Duration: 40

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 40

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used

Inhalation: True
Soil: True
Dermal: True
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: Moderate8HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

```
*********************************
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment.  Please see the input file for details.
Tier2 - What was changed: ED or start age changed
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: F:\Jobs\59010001\OpHRA\HARPOpsMIT1\hra\Worker
Cancer risk total by receptor saved to: F:\Jobs\59010001\OpHRA\HARPOpsMIT1\hra\Worker_MitigatedCancerRi
HRA ran successfully
```

Airport Commerce Center Industrial Project

Health Risk Summary of HARP2 Results

Mitigated Scenario - Worker Exposure—DPM

Maximum Risk			MAXHI NonCancer Chronic	MAXHI Acute
	2.09E-06	2.0872	0.00422	0

Maximally Exposed Individual Receptor	X	Y
MEIR UTM	314650	3923850
Receptor #	140	

HARP File Name

*HARP - HRACalc v22118 10/29/2025 2:30:41 PM - Cancer Risk - Input File: F:\Jobs\59010001\OpHRA\HARPOpsMIT1\hra\Worker_MitigatedHRAInput.hra

REC	GRP	NETID	X	Y	CONC	RISK_SUM	SCENARIO	MAXHI
1	ALL	UCART1	314050	3923150	0.0021	2.0631E-07	40YrCancerDerived_InhSoilDerm	4.17E-04
2	ALL	UCART1	314150	3923150	0.0022	2.2094E-07	40YrCancerDerived_InhSoilDerm	4.46E-04
3	ALL	UCART1	314250	3923150	0.0024	2.4203E-07	40YrCancerDerived_InhSoilDerm	4.89E-04
4	ALL	UCART1	314350	3923150	0.0027	2.7004E-07	40YrCancerDerived_InhSoilDerm	5.45E-04
5	ALL	UCART1	314450	3923150	0.0029	2.8552E-07	40YrCancerDerived_InhSoilDerm	5.77E-04
6	ALL	UCART1	314550	3923150	0.0030	2.9438E-07	40YrCancerDerived_InhSoilDerm	5.95E-04
7	ALL	UCART1	314650	3923150	0.0030	3.0178E-07	40YrCancerDerived_InhSoilDerm	6.10E-04
8	ALL	UCART1	314750	3923150	0.0031	3.1072E-07	40YrCancerDerived_InhSoilDerm	6.28E-04
9	ALL	UCART1	314850	3923150	0.0030	2.9994E-07	40YrCancerDerived_InhSoilDerm	6.06E-04
10	ALL	UCART1	314950	3923150	0.0029	2.893E-07	40YrCancerDerived_InhSoilDerm	5.84E-04
11	ALL	UCART1	315050	3923150	0.0027	2.7088E-07	40YrCancerDerived_InhSoilDerm	5.47E-04
12	ALL	UCART1	313750	3923250	0.0018	1.7533E-07	40YrCancerDerived_InhSoilDerm	3.54E-04
13	ALL	UCART1	313850	3923250	0.0019	1.8356E-07	40YrCancerDerived_InhSoilDerm	3.71E-04
14	ALL	UCART1	313950	3923250	0.0021	2.0539E-07	40YrCancerDerived_InhSoilDerm	4.15E-04
15	ALL	UCART1	314050	3923250	0.0023	2.2503E-07	40YrCancerDerived_InhSoilDerm	4.55E-04
16	ALL	UCART1	314150	3923250	0.0025	2.4548E-07	40YrCancerDerived_InhSoilDerm	4.96E-04
17	ALL	UCART1	314250	3923250	0.0028	2.7547E-07	40YrCancerDerived_InhSoilDerm	5.56E-04
18	ALL	UCART1	314350	3923250	0.0031	3.0712E-07	40YrCancerDerived_InhSoilDerm	6.20E-04
19	ALL	UCART1	314450	3923250	0.0033	3.2191E-07	40YrCancerDerived_InhSoilDerm	6.50E-04
20	ALL	UCART1	314550	3923250	0.0034	3.3263E-07	40YrCancerDerived_InhSoilDerm	6.72E-04
21	ALL	UCART1	314650	3923250	0.0035	3.4582E-07	40YrCancerDerived_InhSoilDerm	6.98E-04
22	ALL	UCART1	314750	3923250	0.0035	3.4748E-07	40YrCancerDerived_InhSoilDerm	7.02E-04
23	ALL	UCART1	314850	3923250	0.0034	3.3466E-07	40YrCancerDerived_InhSoilDerm	6.76E-04
24	ALL	UCART1	314950	3923250	0.0032	3.199E-07	40YrCancerDerived_InhSoilDerm	6.46E-04
25	ALL	UCART1	315050	3923250	0.0030	2.9234E-07	40YrCancerDerived_InhSoilDerm	5.90E-04
26	ALL	UCART1	315150	3923250	0.0026	2.5945E-07	40YrCancerDerived_InhSoilDerm	5.24E-04
27	ALL	UCART1	315250	3923250	0.0024	2.3356E-07	40YrCancerDerived_InhSoilDerm	4.72E-04
28	ALL	UCART1	313550	3923350	0.0017	1.7045E-07	40YrCancerDerived_InhSoilDerm	3.44E-04
29	ALL	UCART1	313650	3923350	0.0018	1.7649E-07	40YrCancerDerived_InhSoilDerm	3.56E-04
30	ALL	UCART1	313750	3923350	0.0020	1.9532E-07	40YrCancerDerived_InhSoilDerm	3.94E-04
31	ALL	UCART1	313850	3923350	0.0021	2.0681E-07	40YrCancerDerived_InhSoilDerm	4.18E-04
32	ALL	UCART1	313950	3923350	0.0022	2.2052E-07	40YrCancerDerived_InhSoilDerm	4.45E-04
33	ALL	UCART1	314050	3923350	0.0025	2.4525E-07	40YrCancerDerived_InhSoilDerm	4.95E-04
34	ALL	UCART1	314150	3923350	0.0028	2.7449E-07	40YrCancerDerived_InhSoilDerm	5.54E-04
35	ALL	UCART1	314250	3923350	0.0032	3.1231E-07	40YrCancerDerived_InhSoilDerm	6.31E-04
36	ALL	UCART1	314350	3923350	0.0035	3.5077E-07	40YrCancerDerived_InhSoilDerm	7.08E-04
37	ALL	UCART1	314450	3923350	0.0037	3.6871E-07	40YrCancerDerived_InhSoilDerm	7.45E-04
38	ALL	UCART1	314550	3923350	0.0039	3.857E-07	40YrCancerDerived_InhSoilDerm	7.79E-04
39	ALL	UCART1	314650	3923350	0.0040	3.9941E-07	40YrCancerDerived_InhSoilDerm	8.07E-04
40	ALL	UCART1	314750	3923350	0.0040	3.9154E-07	40YrCancerDerived_InhSoilDerm	7.91E-04
41	ALL	UCART1	314850	3923350	0.0038	3.7943E-07	40YrCancerDerived_InhSoilDerm	7.66E-04
42	ALL	UCART1	314950	3923350	0.0036	3.5212E-07	40YrCancerDerived_InhSoilDerm	7.11E-04
43	ALL	UCART1	315050	3923350	0.0032	3.152E-07	40YrCancerDerived_InhSoilDerm	6.37E-04
44	ALL	UCART1	315150	3923350	0.0028	2.761E-07	40YrCancerDerived_InhSoilDerm	5.58E-04
45	ALL	UCART1	315250	3923350	0.0024	2.3926E-07	40YrCancerDerived_InhSoilDerm	4.83E-04
46	ALL	UCART1	315350	3923350	0.0021	2.0855E-07	40YrCancerDerived_InhSoilDerm	4.21E-04
47	ALL	UCART1	313550	3923450	0.0020	1.9453E-07	40YrCancerDerived_InhSoilDerm	3.93E-04
48	ALL	UCART1	313650	3923450	0.0021	2.0411E-07	40YrCancerDerived_InhSoilDerm	4.12E-04
49	ALL	UCART1	313750	3923450	0.0022	2.135E-07	40YrCancerDerived_InhSoilDerm	4.31E-04
50	ALL	UCART1	313850	3923450	0.0024	2.3341E-07	40YrCancerDerived_InhSoilDerm	4.71E-04
51	ALL	UCART1	313950	3923450	0.0025	2.4447E-07	40YrCancerDerived_InhSoilDerm	4.94E-04
52	ALL	UCART1	314050	3923450	0.0027	2.6951E-07	40YrCancerDerived_InhSoilDerm	5.44E-04
53	ALL	UCART1	314150	3923450	0.0031	3.1053E-07	40YrCancerDerived_InhSoilDerm	6.27E-04
54	ALL	UCART1	314250	3923450	0.0036	3.5578E-07	40YrCancerDerived_InhSoilDerm	7.19E-04
55	ALL	UCART1	314350	3923450	0.0041	4.0688E-07	40YrCancerDerived_InhSoilDerm	8.22E-04
56	ALL	UCART1	314450	3923450	0.0044	4.3295E-07	40YrCancerDerived_InhSoilDerm	8.74E-04
57	ALL	UCART1	314550	3923450	0.0046	4.5411E-07	40YrCancerDerived_InhSoilDerm	9.17E-04
58	ALL	UCART1	314650	3923450	0.0047	4.6987E-07	40YrCancerDerived_InhSoilDerm	9.49E-04
59	ALL	UCART1	314750	3923450	0.0046	4.5514E-07	40YrCancerDerived_InhSoilDerm	9.19E-04
60	ALL	UCART1	314850	3923450	0.0044	4.3232E-07	40YrCancerDerived_InhSoilDerm	8.73E-04
61	ALL	UCART1	314950	3923450	0.0040	3.9327E-07	40YrCancerDerived_InhSoilDerm	7.94E-04
62	ALL	UCART1	315050	3923450	0.0034	3.3764E-07	40YrCancerDerived_InhSoilDerm	6.82E-04
63	ALL	UCART1	315150	3923450	0.0029	2.8879E-07	40YrCancerDerived_InhSoilDerm	5.83E-04
64	ALL	UCART1	315250	3923450	0.0024	2.3951E-07	40YrCancerDerived_InhSoilDerm	4.84E-04
65	ALL	UCART1	315350	3923450	0.0020	1.9913E-07	40YrCancerDerived_InhSoilDerm	4.02E-04
66	ALL	UCART1	315450	3923450	0.0017	1.6389E-07	40YrCancerDerived_InhSoilDerm	3.31E-04
67	ALL	UCART1	313450	3923550	0.0021	2.0899E-07	40YrCancerDerived_InhSoilDerm	4.22E-04
68	ALL	UCART1	313550	3923550	0.0023	2.2964E-07	40YrCancerDerived_InhSoilDerm	4.64E-04
69	ALL	UCART1	313650	3923550	0.0024	2.3419E-07	40YrCancerDerived_InhSoilDerm	4.73E-04
70	ALL	UCART1	313750	3923550	0.0025	2.5125E-07	40YrCancerDerived_InhSoilDerm	5.07E-04
71	ALL	UCART1	313850	3923550	0.0027	2.6455E-07	40YrCancerDerived_InhSoilDerm	5.34E-04
72	ALL	UCART1	313950	3923550	0.0029	2.8812E-07	40YrCancerDerived_InhSoilDerm	5.82E-04
73	ALL	UCART1	314050	3923550	0.0030	3.0131E-07	40YrCancerDerived_InhSoilDerm	6.09E-04
74	ALL	UCART1	314150	3923550	0.0036	3.5749E-07	40YrCancerDerived_InhSoilDerm	7.22E-04
75	ALL	UCART1	314250	3923550	0.0042	4.1634E-07	40YrCancerDerived_InhSoilDerm	8.41E-04
76	ALL	UCART1	314350	3923550	0.0049	4.8475E-07	40YrCancerDerived_InhSoilDerm	9.79E-04
77	ALL	UCART1	314450	3923550	0.0053	5.2212E-07	40YrCancerDerived_InhSoilDerm	1.05E-03
78	ALL	UCART1	314550	3923550	0.0055	5.4053E-07	40YrCancerDerived_InhSoilDerm	1.09E-03
79	ALL	UCART1	314650	3923550	0.0058	5.7359E-07	40YrCancerDerived_InhSoilDerm	1.16E-03
80	ALL	UCART1	314750	3923550	0.0056	5.5067E-07	40YrCancerDerived_InhSoilDerm	1.11E-03
81	ALL	UCART1	314850	3923550	0.0051	5.0509E-07	40YrCancerDerived_InhSoilDerm	1.02E-03
82	ALL	UCART1	314950	3923550	0.0044	4.3379E-07	40YrCancerDerived_InhSoilDerm	8.76E-04
83	ALL	UCART1	315050	3923550	0.0036	3.5983E-07	40YrCancerDerived_InhSoilDerm	7.27E-04
84	ALL	UCART1	315150	3923550	0.0029	2.8588E-07	40YrCancerDerived_InhSoilDerm	5.77E-04
85	ALL	UCART1	315250	3923550	0.0023	2.2678E-07	40YrCancerDerived_InhSoilDerm	4.58E-04
86	ALL	UCART1	315350	3923550	0.0019	1.879E-07	40YrCancerDerived_InhSoilDerm	3.80E-04
87	ALL	UCART1	315450	3923550	0.0015	1.5345E-07	40YrCancerDerived_InhSoilDerm	3.10E-04
88	ALL	UCART1	315550	3923550	0.0014	1.3546E-07	40YrCancerDerived_InhSoilDerm	2.74E-04
89	ALL	UCART1	313450	3923650	0.0024	2.3985E-07	40YrCancerDerived_InhSoilDerm	4.84E-04
90	ALL	UCART1	313550	3923650	0.0026	2.541E-07	40YrCancerDerived_InhSoilDerm	5.13E-04

HARP File Name

*HARP - HRACalc v22118 10/29/2025 2:30:41 PM - Cancer Risk - Input File: F:\Jobs\59010001\OpHRA\HARPOpsMIT1\hra\Worker_MitigatedHRAInput.hra

REC	GRP	NETID	X	Y	CONC	RISK_SUM	SCENARIO	MAXHI
91	ALL	UCART1	313650	3923650	0.0028	2.8102E-07	40YrCancerDerived_InhSoilDerm	5.68E-04
92	ALL	UCART1	313750	3923650	0.0031	3.0487E-07	40YrCancerDerived_InhSoilDerm	6.16E-04
93	ALL	UCART1	313850	3923650	0.0032	3.1973E-07	40YrCancerDerived_InhSoilDerm	6.46E-04
94	ALL	UCART1	313950	3923650	0.0034	3.3792E-07	40YrCancerDerived_InhSoilDerm	6.83E-04
95	ALL	UCART1	314050	3923650	0.0037	3.709E-07	40YrCancerDerived_InhSoilDerm	7.49E-04
96	ALL	UCART1	314150	3923650	0.0042	0.000000417	40YrCancerDerived_InhSoilDerm	8.42E-04
97	ALL	UCART1	314250	3923650	0.0051	5.0756E-07	40YrCancerDerived_InhSoilDerm	1.03E-03
98	ALL	UCART1	314350	3923650	0.0062	6.1661E-07	40YrCancerDerived_InhSoilDerm	1.25E-03
99	ALL	UCART1	314450	3923650	0.0070	6.9773E-07	40YrCancerDerived_InhSoilDerm	1.41E-03
100	ALL	UCART1	314550	3923650	0.0076	7.5131E-07	40YrCancerDerived_InhSoilDerm	1.52E-03
101	ALL	UCART1	314650	3923650	0.0076	7.5004E-07	40YrCancerDerived_InhSoilDerm	1.51E-03
102	ALL	UCART1	314750	3923650	0.0070	6.9471E-07	40YrCancerDerived_InhSoilDerm	1.40E-03
103	ALL	UCART1	314850	3923650	0.0060	5.9245E-07	40YrCancerDerived_InhSoilDerm	1.20E-03
104	ALL	UCART1	315250	3923650	0.0022	2.141E-07	40YrCancerDerived_InhSoilDerm	4.32E-04
105	ALL	UCART1	315350	3923650	0.0018	1.7916E-07	40YrCancerDerived_InhSoilDerm	3.62E-04
106	ALL	UCART1	315450	3923650	0.0015	1.522E-07	40YrCancerDerived_InhSoilDerm	3.07E-04
107	ALL	UCART1	315550	3923650	0.0013	1.2762E-07	40YrCancerDerived_InhSoilDerm	2.58E-04
108	ALL	UCART1	315650	3923650	0.0011	1.137E-07	40YrCancerDerived_InhSoilDerm	2.30E-04
109	ALL	UCART1	313450	3923750	0.0028	2.778E-07	40YrCancerDerived_InhSoilDerm	5.61E-04
110	ALL	UCART1	313550	3923750	0.0032	3.1273E-07	40YrCancerDerived_InhSoilDerm	6.32E-04
111	ALL	UCART1	313650	3923750	0.0035	3.4168E-07	40YrCancerDerived_InhSoilDerm	6.90E-04
112	ALL	UCART1	313750	3923750	0.0037	3.6996E-07	40YrCancerDerived_InhSoilDerm	7.47E-04
113	ALL	UCART1	313850	3923750	0.0040	3.9696E-07	40YrCancerDerived_InhSoilDerm	8.02E-04
114	ALL	UCART1	313950	3923750	0.0044	4.316E-07	40YrCancerDerived_InhSoilDerm	8.72E-04
115	ALL	UCART1	314050	3923750	0.0048	4.746E-07	40YrCancerDerived_InhSoilDerm	9.59E-04
116	ALL	UCART1	314150	3923750	0.0055	5.445E-07	40YrCancerDerived_InhSoilDerm	1.10E-03
117	ALL	UCART1	314250	3923750	0.0069	6.8362E-07	40YrCancerDerived_InhSoilDerm	1.38E-03
118	ALL	UCART1	314350	3923750	0.0089	0.000000879	40YrCancerDerived_InhSoilDerm	1.78E-03
119	ALL	UCART1	314450	3923750	0.0107	1.0588E-06	40YrCancerDerived_InhSoilDerm	2.14E-03
120	ALL	UCART1	314550	3923750	0.0114	1.1317E-06	40YrCancerDerived_InhSoilDerm	2.29E-03
121	ALL	UCART1	314650	3923750	0.0108	1.0676E-06	40YrCancerDerived_InhSoilDerm	2.16E-03
122	ALL	UCART1	314750	3923750	0.0091	9.0221E-07	40YrCancerDerived_InhSoilDerm	1.82E-03
123	ALL	UCART1	314850	3923750	0.0069	6.8185E-07	40YrCancerDerived_InhSoilDerm	1.38E-03
124	ALL	UCART1	315350	3923750	0.0016	1.6239E-07	40YrCancerDerived_InhSoilDerm	3.28E-04
125	ALL	UCART1	315450	3923750	0.0014	1.3927E-07	40YrCancerDerived_InhSoilDerm	2.81E-04
126	ALL	UCART1	315550	3923750	0.0012	1.2321E-07	40YrCancerDerived_InhSoilDerm	2.49E-04
127	ALL	UCART1	315650	3923750	0.0011	1.0967E-07	40YrCancerDerived_InhSoilDerm	2.22E-04
128	ALL	UCART1	313450	3923850	0.0035	3.5149E-07	40YrCancerDerived_InhSoilDerm	7.10E-04
129	ALL	UCART1	313550	3923850	0.0041	4.058E-07	40YrCancerDerived_InhSoilDerm	8.20E-04
130	ALL	UCART1	313650	3923850	0.0044	4.3989E-07	40YrCancerDerived_InhSoilDerm	8.88E-04
131	ALL	UCART1	313750	3923850	0.0048	4.7599E-07	40YrCancerDerived_InhSoilDerm	9.61E-04
132	ALL	UCART1	313850	3923850	0.0053	5.2922E-07	40YrCancerDerived_InhSoilDerm	1.07E-03
133	ALL	UCART1	313950	3923850	0.0061	6.0299E-07	40YrCancerDerived_InhSoilDerm	1.22E-03
134	ALL	UCART1	314050	3923850	0.0072	7.1074E-07	40YrCancerDerived_InhSoilDerm	1.44E-03
135	ALL	UCART1	314150	3923850	0.0087	8.5886E-07	40YrCancerDerived_InhSoilDerm	1.73E-03
136	ALL	UCART1	314250	3923850	0.0113	0.000001118	40YrCancerDerived_InhSoilDerm	2.26E-03
137	ALL	UCART1	314350	3923850	0.0138	1.3705E-06	40YrCancerDerived_InhSoilDerm	2.77E-03
138	ALL	UCART1	314450	3923850	0.0163	1.6139E-06	40YrCancerDerived_InhSoilDerm	3.26E-03
139	ALL	UCART1	314550	3923850	0.0176	0.000001745	40YrCancerDerived_InhSoilDerm	3.52E-03
140	**ALL**	**UCART1**	**314650**	**3923850**	**0.0211**	**2.0872E-06**	**40YrCancerDerived_InhSoilDerm**	**4.22E-03**
141	ALL	UCART1	314750	3923850	0.0120	1.1929E-06	40YrCancerDerived_InhSoilDerm	2.41E-03
142	ALL	UCART1	314850	3923850	0.0079	7.8272E-07	40YrCancerDerived_InhSoilDerm	1.58E-03
143	ALL	UCART1	315350	3923850	0.0015	1.5271E-07	40YrCancerDerived_InhSoilDerm	3.08E-04
144	ALL	UCART1	315450	3923850	0.0013	1.3114E-07	40YrCancerDerived_InhSoilDerm	2.65E-04
145	ALL	UCART1	315550	3923850	0.0012	1.1501E-07	40YrCancerDerived_InhSoilDerm	2.32E-04
146	ALL	UCART1	315650	3923850	0.0010	1.0226E-07	40YrCancerDerived_InhSoilDerm	2.07E-04
147	ALL	UCART1	313450	3923950	0.0046	4.5777E-07	40YrCancerDerived_InhSoilDerm	9.25E-04
148	ALL	UCART1	313550	3923950	0.0048	4.7038E-07	40YrCancerDerived_InhSoilDerm	9.50E-04
149	ALL	UCART1	313650	3923950	0.0053	5.2953E-07	40YrCancerDerived_InhSoilDerm	1.07E-03
150	ALL	UCART1	313750	3923950	0.0058	5.7145E-07	40YrCancerDerived_InhSoilDerm	1.15E-03
151	ALL	UCART1	313850	3923950	0.0062	6.1771E-07	40YrCancerDerived_InhSoilDerm	1.25E-03
152	ALL	UCART1	313950	3923950	0.0070	6.9348E-07	40YrCancerDerived_InhSoilDerm	1.40E-03
153	ALL	UCART1	314050	3923950	0.0086	8.5062E-07	40YrCancerDerived_InhSoilDerm	1.72E-03
154	ALL	UCART1	315050	3923950	0.0031	3.0561E-07	40YrCancerDerived_InhSoilDerm	6.17E-04
155	ALL	UCART1	315150	3923950	0.0022	2.2147E-07	40YrCancerDerived_InhSoilDerm	4.47E-04
156	ALL	UCART1	315250	3923950	0.0018	1.7704E-07	40YrCancerDerived_InhSoilDerm	3.58E-04
157	ALL	UCART1	315350	3923950	0.0015	1.4871E-07	40YrCancerDerived_InhSoilDerm	3.00E-04
158	ALL	UCART1	315450	3923950	0.0013	1.2932E-07	40YrCancerDerived_InhSoilDerm	2.61E-04
159	ALL	UCART1	315550	3923950	0.0012	1.1482E-07	40YrCancerDerived_InhSoilDerm	2.32E-04
160	ALL	UCART1	315650	3923950	0.0010	1.0383E-07	40YrCancerDerived_InhSoilDerm	2.10E-04
161	ALL	UCART1	315750	3923950	0.0010	9.4938E-08	40YrCancerDerived_InhSoilDerm	1.92E-04
162	ALL	UCART1	313450	3924050	0.0036	3.5516E-07	40YrCancerDerived_InhSoilDerm	7.17E-04
163	ALL	UCART1	313550	3924050	0.0039	3.8228E-07	40YrCancerDerived_InhSoilDerm	7.72E-04
164	ALL	UCART1	313650	3924050	0.0043	4.2279E-07	40YrCancerDerived_InhSoilDerm	8.54E-04
165	ALL	UCART1	313750	3924050	0.0047	4.6482E-07	40YrCancerDerived_InhSoilDerm	9.39E-04
166	ALL	UCART1	313850	3924050	0.0054	5.2998E-07	40YrCancerDerived_InhSoilDerm	1.07E-03
167	ALL	UCART1	313950	3924050	0.0064	6.3701E-07	40YrCancerDerived_InhSoilDerm	1.29E-03
168	ALL	UCART1	314050	3924050	0.0083	8.2544E-07	40YrCancerDerived_InhSoilDerm	1.67E-03
169	ALL	UCART1	315050	3924050	0.0028	2.7928E-07	40YrCancerDerived_InhSoilDerm	5.64E-04
170	ALL	UCART1	315150	3924050	0.0021	2.0372E-07	40YrCancerDerived_InhSoilDerm	4.11E-04
171	ALL	UCART1	315250	3924050	0.0017	1.6559E-07	40YrCancerDerived_InhSoilDerm	3.34E-04
172	ALL	UCART1	315350	3924050	0.0014	1.4048E-07	40YrCancerDerived_InhSoilDerm	2.84E-04
173	ALL	UCART1	315450	3924050	0.0012	1.2319E-07	40YrCancerDerived_InhSoilDerm	2.49E-04
174	ALL	UCART1	315550	3924050	0.0011	1.1022E-07	40YrCancerDerived_InhSoilDerm	2.23E-04
175	ALL	UCART1	315650	3924050	0.0010	9.9025E-08	40YrCancerDerived_InhSoilDerm	2.00E-04
176	ALL	UCART1	315750	3924050	0.0009	9.1627E-08	40YrCancerDerived_InhSoilDerm	1.85E-04
177	ALL	UCART1	313450	3924150	0.0033	3.2534E-07	40YrCancerDerived_InhSoilDerm	6.57E-04
178	ALL	UCART1	313550	3924150	0.0035	3.4211E-07	40YrCancerDerived_InhSoilDerm	6.91E-04
179	ALL	UCART1	313650	3924150	0.0039	3.911E-07	40YrCancerDerived_InhSoilDerm	7.90E-04
180	ALL	UCART1	313750	3924150	0.0044	4.3763E-07	40YrCancerDerived_InhSoilDerm	8.84E-04
181	ALL	UCART1	313850	3924150	0.0051	5.0217E-07	40YrCancerDerived_InhSoilDerm	1.01E-03
182	ALL	UCART1	313950	3924150	0.0061	6.0531E-07	40YrCancerDerived_InhSoilDerm	1.22E-03
183	ALL	UCART1	314050	3924150	0.0077	7.6133E-07	40YrCancerDerived_InhSoilDerm	1.54E-03
184	ALL	UCART1	315050	3924150	0.0025	2.4711E-07	40YrCancerDerived_InhSoilDerm	4.99E-04
185	ALL	UCART1	315150	3924150	0.0017	1.7317E-07	40YrCancerDerived_InhSoilDerm	3.50E-04
186	ALL	UCART1	315250	3924150	0.0013	1.3308E-07	40YrCancerDerived_InhSoilDerm	2.69E-04
187	ALL	UCART1	315350	3924150	0.0011	1.133E-07	40YrCancerDerived_InhSoilDerm	2.29E-04
188	ALL	UCART1	315450	3924150	0.0010	1.0236E-07	40YrCancerDerived_InhSoilDerm	2.07E-04
189	ALL	UCART1	315550	3924150	0.0010	9.4612E-08	40YrCancerDerived_InhSoilDerm	1.91E-04
190	ALL	UCART1	315650	3924150	0.0009	8.8202E-08	40YrCancerDerived_InhSoilDerm	1.78E-04
191	ALL	UCART1	315750	3924150	0.0008	8.2752E-08	40YrCancerDerived_InhSoilDerm	1.67E-04
192	ALL	UCART1	313450	3924250	0.0032	3.1569E-07	40YrCancerDerived_InhSoilDerm	6.38E-04
193	ALL	UCART1	313550	3924250	0.0034	3.4116E-07	40YrCancerDerived_InhSoilDerm	6.89E-04
194	ALL	UCART1	313650	3924250	0.0038	3.7299E-07	40YrCancerDerived_InhSoilDerm	7.53E-04
195	ALL	UCART1	313750	3924250	0.0042	4.1581E-07	40YrCancerDerived_InhSoilDerm	8.40E-04
196	ALL	UCART1	313850	3924250	0.0048	4.7175E-07	40YrCancerDerived_InhSoilDerm	9.53E-04
197	ALL	UCART1	313950	3924250	0.0054	5.3761E-07	40YrCancerDerived_InhSoilDerm	1.09E-03

HARP File Name

*HARP - HRACalc v22118 10/29/2025 2:30:41 PM - Cancer Risk - Input File: F:\Jobs\59010001\OpHRA\HARPOpsMIT1\hra\Worker_MitigatedHRAInput.hra

REC	GRP	NETID	X	Y	CONC	RISK_SUM	SCENARIO	MAXHI
198	ALL	UCART1	314050	3924250	0.0063	6.239E-07	40YrCancerDerived_InhSoilDerm	1.26E-03
199	ALL	UCART1	315050	3924250	0.0021	2.1203E-07	40YrCancerDerived_InhSoilDerm	4.28E-04
200	ALL	UCART1	315150	3924250	0.0016	1.5446E-07	40YrCancerDerived_InhSoilDerm	3.12E-04
201	ALL	UCART1	315250	3924250	0.0012	1.2258E-07	40YrCancerDerived_InhSoilDerm	2.48E-04
202	ALL	UCART1	315350	3924250	0.0011	1.086E-07	40YrCancerDerived_InhSoilDerm	2.19E-04
203	ALL	UCART1	315450	3924250	0.0010	9.682E-08	40YrCancerDerived_InhSoilDerm	1.96E-04
206	ALL	UCART1	315750	3924250	0.0007	6.7417E-08	40YrCancerDerived_InhSoilDerm	1.36E-04
207	ALL	UCART1	313450	3924350	0.0031	3.0325E-07	40YrCancerDerived_InhSoilDerm	6.12E-04
208	ALL	UCART1	313550	3924350	0.0033	3.2486E-07	40YrCancerDerived_InhSoilDerm	6.56E-04
209	ALL	UCART1	313650	3924350	0.0036	3.5796E-07	40YrCancerDerived_InhSoilDerm	7.23E-04
210	ALL	UCART1	313750	3924350	0.0039	3.8757E-07	40YrCancerDerived_InhSoilDerm	7.83E-04
211	ALL	UCART1	313850	3924350	0.0042	4.1902E-07	40YrCancerDerived_InhSoilDerm	8.46E-04
212	ALL	UCART1	313950	3924350	0.0046	4.5129E-07	40YrCancerDerived_InhSoilDerm	9.12E-04
213	ALL	UCART1	314050	3924350	0.0049	4.8807E-07	40YrCancerDerived_InhSoilDerm	9.86E-04
214	ALL	UCART1	314150	3924350	0.0054	5.3073E-07	40YrCancerDerived_InhSoilDerm	1.07E-03
215	ALL	UCART1	314250	3924350	0.0050	0.0000005	40YrCancerDerived_InhSoilDerm	1.01E-03
216	ALL	UCART1	314350	3924350	0.0050	4.9617E-07	40YrCancerDerived_InhSoilDerm	1.00E-03
217	ALL	UCART1	314450	3924350	0.0048	4.7053E-07	40YrCancerDerived_InhSoilDerm	9.50E-04
218	ALL	UCART1	314550	3924350	0.0038	3.721E-07	40YrCancerDerived_InhSoilDerm	7.52E-04
219	ALL	UCART1	315050	3924350	0.0019	1.8323E-07	40YrCancerDerived_InhSoilDerm	3.70E-04
220	ALL	UCART1	315150	3924350	0.0014	1.3439E-07	40YrCancerDerived_InhSoilDerm	2.71E-04
221	ALL	UCART1	315250	3924350	0.0011	1.113E-07	40YrCancerDerived_InhSoilDerm	2.25E-04
222	ALL	UCART1	315350	3924350	0.0010	9.4715E-08	40YrCancerDerived_InhSoilDerm	1.91E-04
223	ALL	UCART1	315450	3924350	0.0009	8.8342E-08	40YrCancerDerived_InhSoilDerm	1.78E-04
224	ALL	UCART1	315550	3924350	0.0008	7.8576E-08	40YrCancerDerived_InhSoilDerm	1.59E-04
225	ALL	UCART1	315650	3924350	0.0007	7.3295E-08	40YrCancerDerived_InhSoilDerm	1.48E-04
226	ALL	UCART1	315750	3924350	0.0007	7.0693E-08	40YrCancerDerived_InhSoilDerm	1.43E-04
227	ALL	UCART1	313450	3924450	0.0030	2.9313E-07	40YrCancerDerived_InhSoilDerm	5.92E-04
228	ALL	UCART1	313550	3924450	0.0032	3.1237E-07	40YrCancerDerived_InhSoilDerm	6.31E-04
229	ALL	UCART1	313650	3924450	0.0033	3.2965E-07	40YrCancerDerived_InhSoilDerm	6.66E-04
230	ALL	UCART1	313750	3924450	0.0036	3.5341E-07	40YrCancerDerived_InhSoilDerm	7.14E-04
231	ALL	UCART1	313850	3924450	0.0037	3.6373E-07	40YrCancerDerived_InhSoilDerm	7.35E-04
232	ALL	UCART1	313950	3924450	0.0038	3.7658E-07	40YrCancerDerived_InhSoilDerm	7.61E-04
233	ALL	UCART1	314050	3924450	0.0039	3.8631E-07	40YrCancerDerived_InhSoilDerm	7.80E-04
234	ALL	UCART1	314150	3924450	0.0040	3.937E-07	40YrCancerDerived_InhSoilDerm	7.95E-04
235	ALL	UCART1	314250	3924450	0.0037	3.6626E-07	40YrCancerDerived_InhSoilDerm	7.40E-04
236	ALL	UCART1	314350	3924450	0.0036	3.5186E-07	40YrCancerDerived_InhSoilDerm	7.11E-04
237	ALL	UCART1	314450	3924450	0.0032	3.1906E-07	40YrCancerDerived_InhSoilDerm	6.44E-04
238	ALL	UCART1	314550	3924450	0.0028	2.797E-07	40YrCancerDerived_InhSoilDerm	5.65E-04
239	ALL	UCART1	315050	3924450	0.0016	1.5637E-07	40YrCancerDerived_InhSoilDerm	3.16E-04
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241	ALL	UCART1	315250	3924450	0.0010	1.0238E-07	40YrCancerDerived_InhSoilDerm	2.07E-04
242	ALL	UCART1	315350	3924450	0.0009	8.7569E-08	40YrCancerDerived_InhSoilDerm	1.77E-04
243	ALL	UCART1	315450	3924450	0.0008	8.2304E-08	40YrCancerDerived_InhSoilDerm	1.66E-04
244	ALL	UCART1	315550	3924450	0.0007	7.1955E-08	40YrCancerDerived_InhSoilDerm	1.45E-04
245	ALL	UCART1	315650	3924450	0.0007	6.8851E-08	40YrCancerDerived_InhSoilDerm	1.39E-04
246	ALL	UCART1	315750	3924450	0.0007	6.6537E-08	40YrCancerDerived_InhSoilDerm	1.34E-04
247	ALL	UCART1	313450	3924550	0.0028	2.7431E-07	40YrCancerDerived_InhSoilDerm	5.54E-04
248	ALL	UCART1	313550	3924550	0.0028	2.8214E-07	40YrCancerDerived_InhSoilDerm	5.70E-04
249	ALL	UCART1	313650	3924550	0.0030	2.975E-07	40YrCancerDerived_InhSoilDerm	6.01E-04
250	ALL	UCART1	313750	3924550	0.0031	3.0723E-07	40YrCancerDerived_InhSoilDerm	6.21E-04
251	ALL	UCART1	313850	3924550	0.0032	3.1448E-07	40YrCancerDerived_InhSoilDerm	6.35E-04
252	ALL	UCART1	313950	3924550	0.0032	3.1636E-07	40YrCancerDerived_InhSoilDerm	6.39E-04
253	ALL	UCART1	314050	3924550	0.0032	3.1684E-07	40YrCancerDerived_InhSoilDerm	6.40E-04
254	ALL	UCART1	314150	3924550	0.0032	3.2001E-07	40YrCancerDerived_InhSoilDerm	6.46E-04
255	ALL	UCART1	314250	3924550	0.0030	2.9524E-07	40YrCancerDerived_InhSoilDerm	5.96E-04
256	ALL	UCART1	314350	3924550	0.0029	2.8395E-07	40YrCancerDerived_InhSoilDerm	5.74E-04
257	ALL	UCART1	314450	3924550	0.0027	2.662E-07	40YrCancerDerived_InhSoilDerm	5.38E-04
258	ALL	UCART1	314550	3924550	0.0025	2.4547E-07	40YrCancerDerived_InhSoilDerm	4.96E-04
259	ALL	UCART1	315050	3924550	0.0014	1.4014E-07	40YrCancerDerived_InhSoilDerm	2.83E-04
260	ALL	UCART1	315150	3924550	0.0011	1.072E-07	40YrCancerDerived_InhSoilDerm	2.17E-04
261	ALL	UCART1	315250	3924550	0.0009	8.9641E-08	40YrCancerDerived_InhSoilDerm	1.81E-04
262	ALL	UCART1	315350	3924550	0.0009	8.5203E-08	40YrCancerDerived_InhSoilDerm	1.72E-04
263	ALL	UCART1	315450	3924550	0.0008	7.8651E-08	40YrCancerDerived_InhSoilDerm	1.59E-04
264	ALL	UCART1	315550	3924550	0.0007	6.9033E-08	40YrCancerDerived_InhSoilDerm	1.39E-04
265	ALL	UCART1	315650	3924550	0.0007	6.7951E-08	40YrCancerDerived_InhSoilDerm	1.37E-04
266	ALL	UCART1	315750	3924550	0.0006	6.0991E-08	40YrCancerDerived_InhSoilDerm	1.23E-04
267	ALL	UCART1	313450	3924650	0.0025	2.4818E-07	40YrCancerDerived_InhSoilDerm	5.01E-04
268	ALL	UCART1	313550	3924650	0.0026	2.5573E-07	40YrCancerDerived_InhSoilDerm	5.17E-04
269	ALL	UCART1	313650	3924650	0.0026	2.6154E-07	40YrCancerDerived_InhSoilDerm	5.28E-04
270	ALL	UCART1	313750	3924650	0.0027	2.6868E-07	40YrCancerDerived_InhSoilDerm	5.43E-04
271	ALL	UCART1	313850	3924650	0.0027	2.6833E-07	40YrCancerDerived_InhSoilDerm	5.42E-04
272	ALL	UCART1	313950	3924650	0.0027	2.7095E-07	40YrCancerDerived_InhSoilDerm	5.47E-04
273	ALL	UCART1	314050	3924650	0.0027	2.6516E-07	40YrCancerDerived_InhSoilDerm	5.36E-04
274	ALL	UCART1	314150	3924650	0.0029	2.8287E-07	40YrCancerDerived_InhSoilDerm	5.71E-04
275	ALL	UCART1	314250	3924650	0.0027	2.6906E-07	40YrCancerDerived_InhSoilDerm	5.43E-04
276	ALL	UCART1	314350	3924650	0.0027	2.6724E-07	40YrCancerDerived_InhSoilDerm	5.40E-04
277	ALL	UCART1	314450	3924650	0.0026	2.5493E-07	40YrCancerDerived_InhSoilDerm	5.15E-04
278	ALL	UCART1	314550	3924650	0.0024	2.4238E-07	40YrCancerDerived_InhSoilDerm	4.90E-04
279	ALL	UCART1	315050	3924650	0.0012	1.1563E-07	40YrCancerDerived_InhSoilDerm	2.34E-04
280	ALL	UCART1	315150	3924650	0.0010	9.4584E-08	40YrCancerDerived_InhSoilDerm	1.91E-04
281	ALL	UCART1	315250	3924650	0.0008	8.2499E-08	40YrCancerDerived_InhSoilDerm	1.67E-04
282	ALL	UCART1	315350	3924650	0.0008	7.6269E-08	40YrCancerDerived_InhSoilDerm	1.54E-04
283	ALL	UCART1	315450	3924650	0.0007	7.0476E-08	40YrCancerDerived_InhSoilDerm	1.42E-04
284	ALL	UCART1	315550	3924650	0.0007	6.9697E-08	40YrCancerDerived_InhSoilDerm	1.41E-04
285	ALL	UCART1	315650	3924650	0.0007	6.5482E-08	40YrCancerDerived_InhSoilDerm	1.32E-04
286	ALL	UCART1	315750	3924650	0.0006	5.8036E-08	40YrCancerDerived_InhSoilDerm	1.17E-04
287	ALL	UCART1	313550	3924750	0.0023	0.000000228	40YrCancerDerived_InhSoilDerm	4.60E-04
288	ALL	UCART1	313650	3924750	0.0023	2.318E-07	40YrCancerDerived_InhSoilDerm	4.68E-04
289	ALL	UCART1	313750	3924750	0.0023	2.2979E-07	40YrCancerDerived_InhSoilDerm	4.64E-04
290	ALL	UCART1	313850	3924750	0.0024	2.3399E-07	40YrCancerDerived_InhSoilDerm	4.73E-04
291	ALL	UCART1	313950	3924750	0.0023	2.2918E-07	40YrCancerDerived_InhSoilDerm	4.63E-04
292	ALL	UCART1	314050	3924750	0.0023	2.2976E-07	40YrCancerDerived_InhSoilDerm	4.64E-04
293	ALL	UCART1	314150	3924750	0.0024	2.4194E-07	40YrCancerDerived_InhSoilDerm	4.89E-04
294	ALL	UCART1	314250	3924750	0.0024	2.4077E-07	40YrCancerDerived_InhSoilDerm	4.86E-04
295	ALL	UCART1	314350	3924750	0.0024	2.3877E-07	40YrCancerDerived_InhSoilDerm	4.82E-04
296	ALL	UCART1	314450	3924750	0.0023	2.2296E-07	40YrCancerDerived_InhSoilDerm	4.50E-04
297	ALL	UCART1	314550	3924750	0.0021	2.0953E-07	40YrCancerDerived_InhSoilDerm	4.23E-04
298	ALL	UCART1	314650	3924750	0.0018	1.8194E-07	40YrCancerDerived_InhSoilDerm	3.67E-04
299	ALL	UCART1	314750	3924750	0.0018	1.7455E-07	40YrCancerDerived_InhSoilDerm	3.53E-04
300	ALL	UCART1	314850	3924750	0.0014	1.4277E-07	40YrCancerDerived_InhSoilDerm	2.88E-04
301	ALL	UCART1	314950	3924750	0.0012	1.1418E-07	40YrCancerDerived_InhSoilDerm	2.31E-04
302	ALL	UCART1	315050	3924750	0.0010	9.4631E-08	40YrCancerDerived_InhSoilDerm	1.91E-04
303	ALL	UCART1	315150	3924750	0.0008	8.3238E-08	40YrCancerDerived_InhSoilDerm	1.68E-04
304	ALL	UCART1	315250	3924750	0.0008	7.7489E-08	40YrCancerDerived_InhSoilDerm	1.57E-04
305	ALL	UCART1	315350	3924750	0.0007	7.1759E-08	40YrCancerDerived_InhSoilDerm	1.45E-04
306	ALL	UCART1	315450	3924750	0.0007	6.8857E-08	40YrCancerDerived_InhSoilDerm	1.39E-04

HARP File Name

*HARP - HRACalc v22118 10/29/2025 2:30:41 PM - Cancer Risk - Input File: F:\Jobs\59010001\OpHRA\HARPOpsMIT1\hra\Worker_MitigatedHRAInput.hra

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307	ALL	UCART1	315550	3924750	0.0006	6.2626E-08	40YrCancerDerived_InhSoilDerm	1.26E-04
308	ALL	UCART1	315650	3924750	0.0006	6.0865E-08	40YrCancerDerived_InhSoilDerm	1.23E-04
309	ALL	UCART1	315750	3924750	0.0006	5.7598E-08	40YrCancerDerived_InhSoilDerm	1.16E-04
310	ALL	UCART1	313650	3924850	0.0020	2.0258E-07	40YrCancerDerived_InhSoilDerm	4.09E-04
311	ALL	UCART1	313750	3924850	0.0021	2.0359E-07	40YrCancerDerived_InhSoilDerm	4.11E-04
312	ALL	UCART1	313850	3924850	0.0021	2.0443E-07	40YrCancerDerived_InhSoilDerm	4.13E-04
313	ALL	UCART1	313950	3924850	0.0020	1.9409E-07	40YrCancerDerived_InhSoilDerm	3.92E-04
314	ALL	UCART1	314050	3924850	0.0019	1.9248E-07	40YrCancerDerived_InhSoilDerm	3.89E-04
315	ALL	UCART1	314150	3924850	0.0019	1.8495E-07	40YrCancerDerived_InhSoilDerm	3.74E-04
316	ALL	UCART1	314250	3924850	0.0018	1.8125E-07	40YrCancerDerived_InhSoilDerm	3.66E-04
317	ALL	UCART1	314350	3924850	0.0018	1.819E-07	40YrCancerDerived_InhSoilDerm	3.67E-04
318	ALL	UCART1	314450	3924850	0.0017	1.6662E-07	40YrCancerDerived_InhSoilDerm	3.37E-04
319	ALL	UCART1	314550	3924850	0.0016	1.567E-07	40YrCancerDerived_InhSoilDerm	3.16E-04
320	ALL	UCART1	314650	3924850	0.0014	1.4013E-07	40YrCancerDerived_InhSoilDerm	2.83E-04
321	ALL	UCART1	314750	3924850	0.0013	1.254E-07	40YrCancerDerived_InhSoilDerm	2.53E-04
322	ALL	UCART1	314850	3924850	0.0011	1.0673E-07	40YrCancerDerived_InhSoilDerm	2.16E-04
323	ALL	UCART1	314950	3924850	0.0009	9.1004E-08	40YrCancerDerived_InhSoilDerm	1.84E-04
324	ALL	UCART1	315050	3924850	0.0009	8.5255E-08	40YrCancerDerived_InhSoilDerm	1.72E-04
325	ALL	UCART1	315150	3924850	0.0008	7.8397E-08	40YrCancerDerived_InhSoilDerm	1.58E-04
326	ALL	UCART1	315250	3924850	0.0007	7.1725E-08	40YrCancerDerived_InhSoilDerm	1.45E-04
327	ALL	UCART1	315350	3924850	0.0007	6.6308E-08	40YrCancerDerived_InhSoilDerm	1.34E-04
328	ALL	UCART1	315450	3924850	0.0007	6.542E-08	40YrCancerDerived_InhSoilDerm	1.32E-04
329	ALL	UCART1	315550	3924850	0.0006	6.0999E-08	40YrCancerDerived_InhSoilDerm	1.23E-04
330	ALL	UCART1	315650	3924850	0.0006	5.5711E-08	40YrCancerDerived_InhSoilDerm	1.13E-04
331	ALL	UCART1	315750	3924850	0.0005	5.2558E-08	40YrCancerDerived_InhSoilDerm	1.06E-04
332	ALL	UCART1	313750	3924950	0.0018	1.8183E-07	40YrCancerDerived_InhSoilDerm	3.67E-04
333	ALL	UCART1	313850	3924950	0.0017	1.7198E-07	40YrCancerDerived_InhSoilDerm	3.47E-04
334	ALL	UCART1	313950	3924950	0.0017	1.6931E-07	40YrCancerDerived_InhSoilDerm	3.42E-04
335	ALL	UCART1	314050	3924950	0.0017	1.6455E-07	40YrCancerDerived_InhSoilDerm	3.32E-04
336	ALL	UCART1	314150	3924950	0.0016	1.5526E-07	40YrCancerDerived_InhSoilDerm	3.14E-04
337	ALL	UCART1	314250	3924950	0.0015	0.000000152	40YrCancerDerived_InhSoilDerm	3.07E-04
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343	ALL	UCART1	314850	3924950	0.0010	9.8454E-08	40YrCancerDerived_InhSoilDerm	1.99E-04
344	ALL	UCART1	314950	3924950	0.0008	8.2424E-08	40YrCancerDerived_InhSoilDerm	1.66E-04
345	ALL	UCART1	315050	3924950	0.0008	7.7713E-08	40YrCancerDerived_InhSoilDerm	1.57E-04
346	ALL	UCART1	315150	3924950	0.0007	7.3252E-08	40YrCancerDerived_InhSoilDerm	1.48E-04
347	ALL	UCART1	315250	3924950	0.0007	6.8226E-08	40YrCancerDerived_InhSoilDerm	1.38E-04
348	ALL	UCART1	315350	3924950	0.0006	6.2986E-08	40YrCancerDerived_InhSoilDerm	1.27E-04
349	ALL	UCART1	315450	3924950	0.0006	5.9465E-08	40YrCancerDerived_InhSoilDerm	1.20E-04
350	ALL	UCART1	315550	3924950	0.0006	5.9537E-08	40YrCancerDerived_InhSoilDerm	1.20E-04
351	ALL	UCART1	315650	3924950	0.0005	5.2565E-08	40YrCancerDerived_InhSoilDerm	1.06E-04
352	ALL	UCART1	313950	3925050	0.0015	1.4846E-07	40YrCancerDerived_InhSoilDerm	3.00E-04
353	ALL	UCART1	314050	3925050	0.0014	1.4073E-07	40YrCancerDerived_InhSoilDerm	2.84E-04
354	ALL	UCART1	314150	3925050	0.0014	1.3655E-07	40YrCancerDerived_InhSoilDerm	2.76E-04
355	ALL	UCART1	314250	3925050	0.0013	1.3108E-07	40YrCancerDerived_InhSoilDerm	2.65E-04
356	ALL	UCART1	314350	3925050	0.0013	1.3191E-07	40YrCancerDerived_InhSoilDerm	2.66E-04
357	ALL	UCART1	314450	3925050	0.0012	1.1846E-07	40YrCancerDerived_InhSoilDerm	2.39E-04
358	ALL	UCART1	314550	3925050	0.0012	1.1542E-07	40YrCancerDerived_InhSoilDerm	2.33E-04
359	ALL	UCART1	314650	3925050	0.0011	1.0876E-07	40YrCancerDerived_InhSoilDerm	2.20E-04
360	ALL	UCART1	314750	3925050	0.0009	8.9939E-08	40YrCancerDerived_InhSoilDerm	1.82E-04
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363	ALL	UCART1	315050	3925050	0.0007	7.2363E-08	40YrCancerDerived_InhSoilDerm	1.46E-04
364	ALL	UCART1	315150	3925050	0.0007	6.7215E-08	40YrCancerDerived_InhSoilDerm	1.36E-04
365	ALL	UCART1	315250	3925050	0.0006	6.355E-08	40YrCancerDerived_InhSoilDerm	1.28E-04
366	ALL	UCART1	315350	3925050	0.0006	6.067E-08	40YrCancerDerived_InhSoilDerm	1.23E-04
367	ALL	UCART1	315450	3925050	0.0006	5.6198E-08	40YrCancerDerived_InhSoilDerm	1.14E-04
368	ALL	UCART1	315550	3925050	0.0005	5.3199E-08	40YrCancerDerived_InhSoilDerm	1.07E-04
369	ALL	UCART1	315650	3925050	0.0005	5.389E-08	40YrCancerDerived_InhSoilDerm	1.09E-04
370	ALL	UCART1	314050	3925150	0.0013	1.2646E-07	40YrCancerDerived_InhSoilDerm	2.55E-04
371	ALL	UCART1	314150	3925150	0.0012	1.2223E-07	40YrCancerDerived_InhSoilDerm	2.47E-04
372	ALL	UCART1	314250	3925150	0.0012	1.1837E-07	40YrCancerDerived_InhSoilDerm	2.39E-04
373	ALL	UCART1	314350	3925150	0.0012	1.2105E-07	40YrCancerDerived_InhSoilDerm	2.45E-04
374	ALL	UCART1	314450	3925150	0.0011	1.0897E-07	40YrCancerDerived_InhSoilDerm	2.20E-04
375	ALL	UCART1	314550	3925150	0.0011	1.0703E-07	40YrCancerDerived_InhSoilDerm	2.16E-04
376	ALL	UCART1	314650	3925150	0.0010	1.0074E-07	40YrCancerDerived_InhSoilDerm	2.03E-04
377	ALL	UCART1	314750	3925150	0.0009	8.5862E-08	40YrCancerDerived_InhSoilDerm	1.73E-04
378	ALL	UCART1	314850	3925150	0.0008	8.162E-08	40YrCancerDerived_InhSoilDerm	1.65E-04
379	ALL	UCART1	314950	3925150	0.0007	7.3877E-08	40YrCancerDerived_InhSoilDerm	1.49E-04
380	ALL	UCART1	315050	3925150	0.0007	6.4691E-08	40YrCancerDerived_InhSoilDerm	1.31E-04
381	ALL	UCART1	315150	3925150	0.0006	6.1352E-08	40YrCancerDerived_InhSoilDerm	1.24E-04
382	ALL	UCART1	315250	3925150	0.0006	5.8528E-08	40YrCancerDerived_InhSoilDerm	1.18E-04
383	ALL	UCART1	315350	3925150	0.0006	5.4811E-08	40YrCancerDerived_InhSoilDerm	1.11E-04
384	ALL	UCART1	315450	3925150	0.0005	5.3512E-08	40YrCancerDerived_InhSoilDerm	1.08E-04
385	ALL	UCART1	315550	3925150	0.0005	4.9649E-08	40YrCancerDerived_InhSoilDerm	1.00E-04
386	ALL	UCART1	314150	3925250	0.0011	1.0905E-07	40YrCancerDerived_InhSoilDerm	2.20E-04
387	ALL	UCART1	314250	3925250	0.0011	1.0611E-07	40YrCancerDerived_InhSoilDerm	2.14E-04
388	ALL	UCART1	314350	3925250	0.0011	1.0878E-07	40YrCancerDerived_InhSoilDerm	2.20E-04
389	ALL	UCART1	314450	3925250	0.0010	1.0036E-07	40YrCancerDerived_InhSoilDerm	2.03E-04
390	ALL	UCART1	314550	3925250	0.0010	9.9777E-08	40YrCancerDerived_InhSoilDerm	2.02E-04
391	ALL	UCART1	314650	3925250	0.0009	9.3734E-08	40YrCancerDerived_InhSoilDerm	1.89E-04
392	ALL	UCART1	314750	3925250	0.0009	8.5245E-08	40YrCancerDerived_InhSoilDerm	1.72E-04
393	ALL	UCART1	314850	3925250	0.0007	7.2522E-08	40YrCancerDerived_InhSoilDerm	1.46E-04
394	ALL	UCART1	314950	3925250	0.0007	6.864E-08	40YrCancerDerived_InhSoilDerm	1.39E-04
395	ALL	UCART1	315050	3925250	0.0006	6.3823E-08	40YrCancerDerived_InhSoilDerm	1.29E-04
396	ALL	UCART1	315150	3925250	0.0006	6.0851E-08	40YrCancerDerived_InhSoilDerm	1.23E-04
397	ALL	UCART1	315250	3925250	0.0006	5.7728E-08	40YrCancerDerived_InhSoilDerm	1.17E-04
398	ALL	UCART1	315350	3925250	0.0006	5.5808E-08	40YrCancerDerived_InhSoilDerm	1.13E-04
399	ALL	UCART1	315450	3925250	0.0005	4.5596E-08	40YrCancerDerived_InhSoilDerm	9.21E-05
400	ALL	UCART1	314250	3925350	0.0010	9.6105E-08	40YrCancerDerived_InhSoilDerm	1.94E-04
401	ALL	UCART1	314350	3925350	0.0010	9.7618E-08	40YrCancerDerived_InhSoilDerm	1.97E-04
402	ALL	UCART1	314450	3925350	0.0009	8.8104E-08	40YrCancerDerived_InhSoilDerm	1.78E-04
403	ALL	UCART1	314550	3925350	0.0009	8.7209E-08	40YrCancerDerived_InhSoilDerm	1.76E-04
404	ALL	UCART1	314650	3925350	0.0008	8.2239E-08	40YrCancerDerived_InhSoilDerm	1.66E-04
405	ALL	UCART1	314750	3925350	0.0008	7.7625E-08	40YrCancerDerived_InhSoilDerm	1.57E-04
406	ALL	UCART1	314850	3925350	0.0007	6.6172E-08	40YrCancerDerived_InhSoilDerm	1.34E-04
407	ALL	UCART1	314950	3925350	0.0007	6.611E-08	40YrCancerDerived_InhSoilDerm	1.34E-04
408	ALL	UCART1	315050	3925350	0.0006	6.0249E-08	40YrCancerDerived_InhSoilDerm	1.22E-04
409	ALL	UCART1	315150	3925350	0.0005	5.2364E-08	40YrCancerDerived_InhSoilDerm	1.06E-04
410	ALL	UCART1	315250	3925350	0.0006	5.5256E-08	40YrCancerDerived_InhSoilDerm	1.12E-04
411	ALL	UCART1	315350	3925350	0.0005	5.1693E-08	40YrCancerDerived_InhSoilDerm	1.04E-04
412	ALL	UCART1	314450	3925450	0.0008	8.141E-08	40YrCancerDerived_InhSoilDerm	1.64E-04
413	ALL	UCART1	314550	3925450	0.0008	7.8801E-08	40YrCancerDerived_InhSoilDerm	1.59E-04

HARP File Name

*HARP - HRACalc v22118 10/29/2025 2:30:41 PM - Cancer Risk - Input File: F:\Jobs\59010001\OpHRA\HARPOpsMIT1\hra\Worker_MitigatedHRAInput.hra

REC	GRP	NETID	X	Y	CONC	RISK_SUM	SCENARIO	MAXHI
414	ALL	UCART1	314650	3925450	0.0007	7.42E-08	40YrCancerDerived_InhSoilDerm	1.50E-04
415	ALL	UCART1	314750	3925450	0.0007	7.209E-08	40YrCancerDerived_InhSoilDerm	1.46E-04
416	ALL	UCART1	314850	3925450	0.0006	6.3909E-08	40YrCancerDerived_InhSoilDerm	1.29E-04
417	ALL	UCART1	314950	3925450	0.0006	6.1094E-08	40YrCancerDerived_InhSoilDerm	1.23E-04
418	ALL	UCART1	315050	3925450	0.0006	5.7684E-08	40YrCancerDerived_InhSoilDerm	1.17E-04
419	ALL	UCART1	315150	3925450	0.0005	5.3545E-08	40YrCancerDerived_InhSoilDerm	1.08E-04
420	ALL	UCART1	315250	3925450	0.0005	4.8091E-08	40YrCancerDerived_InhSoilDerm	9.71E-05
546	ALL	NON-RES	314074	3923738	0.0048	4.7042E-07	40YrCancerDerived_InhSoilDerm	9.50E-04
547	ALL	NON-RES	314152	3923719	0.0050	4.9125E-07	40YrCancerDerived_InhSoilDerm	9.92E-04
548	ALL	NON-RES	314280	3923708	0.0064	6.3818E-07	40YrCancerDerived_InhSoilDerm	1.29E-03
549	ALL	NON-RES	314624	3923582	0.0063	6.2474E-07	40YrCancerDerived_InhSoilDerm	1.26E-03
550	ALL	NON-RES	314388	3923589	0.0056	5.5152E-07	40YrCancerDerived_InhSoilDerm	1.11E-03
551	ALL	NON-RES	314278	3923589	0.0048	4.7122E-07	40YrCancerDerived_InhSoilDerm	9.52E-04
552	ALL	NON-RES	314193	3923588	0.0041	4.0548E-07	40YrCancerDerived_InhSoilDerm	8.19E-04

HARP Project Summary Report 10/29/2025 2:32:58 PM

PROJECT INFORMATION
HARP Version: 22118
Project Name: HARPOpsUNMIT1
Project Output Directory: F:\Jobs\59010001\OpHRA\HARPOpsUNMIT1
HARP Database: NA

FACILITY INFORMATION
Origin
X (m):0
Y (m):0
Zone:1
No. of Sources:0
No. of Buildings:0

EMISSION INVENTORY
No. of Pollutants:18
No. of Background Pollutants:0

Emissions

ScrID	StkID	ProID	PolID	PolAbbrev	Multi	Annual Ems (lbs/yr)	MaxHr Ems (lbs/hr)	MWAF
DOCK1	0	0	9901	DieselExhPM	1	0.32	0	1
DOCK2	0	0	9901	DieselExhPM	1	0.19	0	1
DOCK3	0	0	9901	DieselExhPM	1	0.18	0	1
DOCK4_NE	0	0	9901	DieselExhPM	1	0.28	0	1
DOCK4_NW	0	0	9901	DieselExhPM	1	0.28	0	1
DOCK4_SW	0	0	9901	DieselExhPM	1	0.28	0	1
DOCK4_SE	0	0	9901	DieselExhPM	1	0.28	0	1
ONSITE	0	0	9901	DieselExhPM	1	3.23	0	1
OFFSITE1	0	0	9901	DieselExhPM	1	4.79	0	1
OFFSITE2	0	0	9901	DieselExhPM	1	1.6	0	1
TRU4_SE	0	0	9901	DieselExhPM	1	67.47	0	1
TRU4_SW	0	0	9901	DieselExhPM	1	67.47	0	1
EGEN1	0	0	9901	DieselExhPM	1	0.724	0	1
EGEN2	0	0	9901	DieselExhPM	1	0.724	0	1
EGEN3	0	0	9901	DieselExhPM	1	0.724	0	1
EGEN4-1	0	0	9901	DieselExhPM	1	0.724	0	1
EGEN4-2	0	0	9901	DieselExhPM	1	0.724	0	1
EGEN4-3	0	0	9901	DieselExhPM	1	4.748	0	1

Background

PolID	PolAbbrev	Conc (ug/m^3)	MWAF

Ground level concentration files (\glc\)

9901MAXHR.txt
9901PER.txt

POLLUTANT HEALTH INFORMATION
Health Database: C:\HARP2\Tables\HEALTH17320.mdb
Health Table Version: HEALTH25268
Official: True

PolID	PolAbbrev	InhCancer	OralCancer	AcuteREL	InhChronicREL	OralChronicREL	InhChronic8HRREL
9901	DieselExhPM	1.1			5		

HARP2 - HRACalc (dated 22118) 10/29/2025 2:23:09 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Worker
Scenario: Cancer
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 16
Total Exposure Duration: 40

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 40

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: Moderate8HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: F:\Jobs\59010001\OpHRA\HARPOpsUNMIT1\hra\Worker_UnmitCancerRisk.csv
Cancer risk total by receptor saved to: F:\Jobs\59010001\OpHRA\HARPOpsUNMIT1\hra\Worker_UnmitCancerRiskSumByRec.csv
HRA ran successfully

Airport Commerce Center Industrial Project

Health Risk Summary of HARP2 Results

Operations - Unmitigated Workier Exposure —DPM

Maximum Risk		RISK_SUM	Cancer Risk/million		
		4.21E-06	4.2101	0.00850	0

Maximally Exposed Individual Receptor	X	Y
MEIR UTM	314650	3923850
Receptor #	140	

HARP File Name

*HARP - HRACalc v22118 10/29/2025 2:23:09 PM - Cancer Risk - Input File: F:\Jobs\59010001\OpHRA\HARPOpsUNMIT1\hra\Worker_UnmitHRAInput.hra

REC	GRP	NETID	X	Y	CONC	RISK_SUM	SCENARIO	MAXHI
1	ALL	UCART1	314050	3923150	0.0036	3.5599E-07	40YrCancerDerived_InhSoilDerm	7.19E-04
2	ALL	UCART1	314150	3923150	0.0039	3.8953E-07	40YrCancerDerived_InhSoilDerm	7.87E-04
3	ALL	UCART1	314250	3923150	0.0044	4.3245E-07	40YrCancerDerived_InhSoilDerm	8.73E-04
4	ALL	UCART1	314350	3923150	0.0049	4.8768E-07	40YrCancerDerived_InhSoilDerm	9.85E-04
5	ALL	UCART1	314450	3923150	0.0053	5.2524E-07	40YrCancerDerived_InhSoilDerm	1.06E-03
6	ALL	UCART1	314550	3923150	0.0056	5.5267E-07	40YrCancerDerived_InhSoilDerm	1.12E-03
7	ALL	UCART1	314650	3923150	0.0058	5.7277E-07	40YrCancerDerived_InhSoilDerm	1.16E-03
8	ALL	UCART1	314750	3923150	0.0059	5.8285E-07	40YrCancerDerived_InhSoilDerm	1.18E-03
9	ALL	UCART1	314850	3923150	0.0057	5.6503E-07	40YrCancerDerived_InhSoilDerm	1.14E-03
10	ALL	UCART1	314950	3923150	0.0055	5.4359E-07	40YrCancerDerived_InhSoilDerm	1.10E-03
11	ALL	UCART1	315050	3923150	0.0051	5.0395E-07	40YrCancerDerived_InhSoilDerm	1.02E-03
12	ALL	UCART1	313750	3923250	0.0030	2.9513E-07	40YrCancerDerived_InhSoilDerm	5.96E-04
13	ALL	UCART1	313850	3923250	0.0032	3.1375E-07	40YrCancerDerived_InhSoilDerm	6.34E-04
14	ALL	UCART1	313950	3923250	0.0035	3.5014E-07	40YrCancerDerived_InhSoilDerm	7.07E-04
15	ALL	UCART1	314050	3923250	0.0039	3.887E-07	40YrCancerDerived_InhSoilDerm	7.85E-04
16	ALL	UCART1	314150	3923250	0.0044	4.3221E-07	40YrCancerDerived_InhSoilDerm	8.73E-04
17	ALL	UCART1	314250	3923250	0.0049	4.9001E-07	40YrCancerDerived_InhSoilDerm	9.90E-04
18	ALL	UCART1	314350	3923250	0.0056	5.5583E-07	40YrCancerDerived_InhSoilDerm	1.12E-03
19	ALL	UCART1	314450	3923250	0.0060	5.9688E-07	40YrCancerDerived_InhSoilDerm	1.21E-03
20	ALL	UCART1	314550	3923250	0.0064	6.2904E-07	40YrCancerDerived_InhSoilDerm	1.27E-03
21	ALL	UCART1	314650	3923250	0.0066	6.573E-07	40YrCancerDerived_InhSoilDerm	1.33E-03
22	ALL	UCART1	314750	3923250	0.0066	6.5757E-07	40YrCancerDerived_InhSoilDerm	1.33E-03
23	ALL	UCART1	314850	3923250	0.0064	6.3362E-07	40YrCancerDerived_InhSoilDerm	1.28E-03
24	ALL	UCART1	314950	3923250	0.0060	5.9893E-07	40YrCancerDerived_InhSoilDerm	1.21E-03
25	ALL	UCART1	315050	3923250	0.0055	5.4121E-07	40YrCancerDerived_InhSoilDerm	1.09E-03
26	ALL	UCART1	315150	3923250	0.0048	4.7531E-07	40YrCancerDerived_InhSoilDerm	9.60E-04
27	ALL	UCART1	315250	3923250	0.0042	4.1994E-07	40YrCancerDerived_InhSoilDerm	8.48E-04
28	ALL	UCART1	313550	3923350	0.0029	2.8522E-07	40YrCancerDerived_InhSoilDerm	5.76E-04
29	ALL	UCART1	313650	3923350	0.0030	2.9724E-07	40YrCancerDerived_InhSoilDerm	6.00E-04
30	ALL	UCART1	313750	3923350	0.0033	3.2522E-07	40YrCancerDerived_InhSoilDerm	6.57E-04
31	ALL	UCART1	313850	3923350	0.0035	3.4923E-07	40YrCancerDerived_InhSoilDerm	7.05E-04
32	ALL	UCART1	313950	3923350	0.0038	3.7775E-07	40YrCancerDerived_InhSoilDerm	7.63E-04
33	ALL	UCART1	314050	3923350	0.0043	4.2348E-07	40YrCancerDerived_InhSoilDerm	8.55E-04
34	ALL	UCART1	314150	3923350	0.0049	4.8247E-07	40YrCancerDerived_InhSoilDerm	9.74E-04
35	ALL	UCART1	314250	3923350	0.0056	5.5601E-07	40YrCancerDerived_InhSoilDerm	1.12E-03
36	ALL	UCART1	314350	3923350	0.0064	6.3721E-07	40YrCancerDerived_InhSoilDerm	1.29E-03
37	ALL	UCART1	314450	3923350	0.0070	6.8889E-07	40YrCancerDerived_InhSoilDerm	1.39E-03
38	ALL	UCART1	314550	3923350	0.0074	7.3373E-07	40YrCancerDerived_InhSoilDerm	1.48E-03
39	ALL	UCART1	314650	3923350	0.0077	7.6368E-07	40YrCancerDerived_InhSoilDerm	1.54E-03
40	ALL	UCART1	314750	3923350	0.0076	7.4945E-07	40YrCancerDerived_InhSoilDerm	1.51E-03
41	ALL	UCART1	314850	3923350	0.0073	7.1813E-07	40YrCancerDerived_InhSoilDerm	1.45E-03
42	ALL	UCART1	314950	3923350	0.0067	6.592E-07	40YrCancerDerived_InhSoilDerm	1.33E-03
43	ALL	UCART1	315050	3923350	0.0059	5.8084E-07	40YrCancerDerived_InhSoilDerm	1.17E-03
44	ALL	UCART1	315150	3923350	0.0050	4.9999E-07	40YrCancerDerived_InhSoilDerm	1.01E-03
45	ALL	UCART1	315250	3923350	0.0043	4.269E-07	40YrCancerDerived_InhSoilDerm	8.62E-04
46	ALL	UCART1	315350	3923350	0.0037	3.6473E-07	40YrCancerDerived_InhSoilDerm	7.37E-04
47	ALL	UCART1	313550	3923450	0.0033	3.248E-07	40YrCancerDerived_InhSoilDerm	6.56E-04
48	ALL	UCART1	313650	3923450	0.0035	3.4188E-07	40YrCancerDerived_InhSoilDerm	6.91E-04
49	ALL	UCART1	313750	3923450	0.0036	3.5883E-07	40YrCancerDerived_InhSoilDerm	7.25E-04
50	ALL	UCART1	313850	3923450	0.0039	3.9038E-07	40YrCancerDerived_InhSoilDerm	7.88E-04
51	ALL	UCART1	313950	3923450	0.0042	4.1751E-07	40YrCancerDerived_InhSoilDerm	8.43E-04
52	ALL	UCART1	314050	3923450	0.0047	4.6388E-07	40YrCancerDerived_InhSoilDerm	9.37E-04
53	ALL	UCART1	314150	3923450	0.0055	5.4302E-07	40YrCancerDerived_InhSoilDerm	1.10E-03
54	ALL	UCART1	314250	3923450	0.0064	6.3695E-07	40YrCancerDerived_InhSoilDerm	1.29E-03
55	ALL	UCART1	314350	3923450	0.0075	7.4308E-07	40YrCancerDerived_InhSoilDerm	1.50E-03
56	ALL	UCART1	314450	3923450	0.0082	8.1609E-07	40YrCancerDerived_InhSoilDerm	1.65E-03
57	ALL	UCART1	314550	3923450	0.0088	8.7493E-07	40YrCancerDerived_InhSoilDerm	1.77E-03
58	ALL	UCART1	314650	3923450	0.0092	9.0741E-07	40YrCancerDerived_InhSoilDerm	1.83E-03
59	ALL	UCART1	314750	3923450	0.0088	8.7577E-07	40YrCancerDerived_InhSoilDerm	1.77E-03
60	ALL	UCART1	314850	3923450	0.0083	8.2057E-07	40YrCancerDerived_InhSoilDerm	1.66E-03
61	ALL	UCART1	314950	3923450	0.0074	7.318E-07	40YrCancerDerived_InhSoilDerm	1.48E-03
62	ALL	UCART1	315050	3923450	0.0062	6.1709E-07	40YrCancerDerived_InhSoilDerm	1.25E-03
63	ALL	UCART1	315150	3923450	0.0052	5.1496E-07	40YrCancerDerived_InhSoilDerm	1.04E-03
64	ALL	UCART1	315250	3923450	0.0043	4.2096E-07	40YrCancerDerived_InhSoilDerm	8.50E-04
65	ALL	UCART1	315350	3923450	0.0035	3.4298E-07	40YrCancerDerived_InhSoilDerm	6.93E-04
66	ALL	UCART1	315450	3923450	0.0028	2.7822E-07	40YrCancerDerived_InhSoilDerm	5.62E-04
67	ALL	UCART1	313450	3923550	0.0035	3.5026E-07	40YrCancerDerived_InhSoilDerm	7.07E-04
68	ALL	UCART1	313550	3923550	0.0039	3.8135E-07	40YrCancerDerived_InhSoilDerm	7.70E-04
69	ALL	UCART1	313650	3923550	0.0040	3.9203E-07	40YrCancerDerived_InhSoilDerm	7.92E-04
70	ALL	UCART1	313750	3923550	0.0042	4.1858E-07	40YrCancerDerived_InhSoilDerm	8.45E-04
71	ALL	UCART1	313850	3923550	0.0045	4.4466E-07	40YrCancerDerived_InhSoilDerm	8.98E-04
72	ALL	UCART1	313950	3923550	0.0049	4.8638E-07	40YrCancerDerived_InhSoilDerm	9.82E-04
73	ALL	UCART1	314050	3923550	0.0053	5.2451E-07	40YrCancerDerived_InhSoilDerm	1.06E-03
74	ALL	UCART1	314150	3923550	0.0063	6.2734E-07	40YrCancerDerived_InhSoilDerm	1.27E-03
75	ALL	UCART1	314250	3923550	0.0076	7.5185E-07	40YrCancerDerived_InhSoilDerm	1.52E-03
76	ALL	UCART1	314350	3923550	0.0090	8.9216E-07	40YrCancerDerived_InhSoilDerm	1.80E-03
77	ALL	UCART1	314450	3923550	0.0101	9.9604E-07	40YrCancerDerived_InhSoilDerm	2.01E-03
78	ALL	UCART1	314550	3923550	0.0107	0.000001055	40YrCancerDerived_InhSoilDerm	2.13E-03
79	ALL	UCART1	314650	3923550	0.0113	1.1221E-06	40YrCancerDerived_InhSoilDerm	2.27E-03
80	ALL	UCART1	314750	3923550	0.0107	1.0636E-06	40YrCancerDerived_InhSoilDerm	2.15E-03
81	ALL	UCART1	314850	3923550	0.0096	9.5462E-07	40YrCancerDerived_InhSoilDerm	1.93E-03
82	ALL	UCART1	314950	3923550	0.0081	7.9947E-07	40YrCancerDerived_InhSoilDerm	1.61E-03
83	ALL	UCART1	315050	3923550	0.0065	6.4399E-07	40YrCancerDerived_InhSoilDerm	1.30E-03
84	ALL	UCART1	315150	3923550	0.0051	5.0243E-07	40YrCancerDerived_InhSoilDerm	1.01E-03
85	ALL	UCART1	315250	3923550	0.0039	3.907E-07	40YrCancerDerived_InhSoilDerm	7.89E-04
86	ALL	UCART1	315350	3923550	0.0032	3.1488E-07	40YrCancerDerived_InhSoilDerm	6.36E-04
87	ALL	UCART1	315450	3923550	0.0026	2.5445E-07	40YrCancerDerived_InhSoilDerm	5.14E-04
88	ALL	UCART1	315550	3923550	0.0022	2.1989E-07	40YrCancerDerived_InhSoilDerm	4.44E-04
89	ALL	UCART1	313450	3923650	0.0040	3.992E-07	40YrCancerDerived_InhSoilDerm	8.06E-04
90	ALL	UCART1	313550	3923650	0.0043	4.2262E-07	40YrCancerDerived_InhSoilDerm	8.54E-04

HARP File Name

*HARP - HRACalc v22118 10/29/2025 2:23:09 PM - Cancer Risk - Input File: F:\Jobs\59010001\OpHRA\HARPOpsUNMIT1\hra\Worker_UnmitHRAInput.hra

REC	GRP	NETID	X	Y	CONC	RISK_SUM	SCENARIO	MAXHI

HARP File Name

*HARP - HRACalc v22118 10/29/2025 2:23:09 PM - Cancer Risk - Input File: F:\Jobs\59010001\OpHRA\HARPOpsUNMIT1\hra\Worker_UnmitHRAInput.hra

REC	GRP	NETID	X	Y	CONC	RISK_SUM	SCENARIO	MAXHI
198	ALL	UCART1	314050	3924250	0.0118	0.000001164	40YrCancerDerived_InhSoilDerm	2.35E-03
199	ALL	UCART1	315050	3924250	0.0028	2.7834E-07	40YrCancerDerived_InhSoilDerm	5.62E-04
200	ALL	UCART1	315150	3924250	0.0021	2.0845E-07	40YrCancerDerived_InhSoilDerm	4.21E-04
201	ALL	UCART1	315250	3924250	0.0017	1.6753E-07	40YrCancerDerived_InhSoilDerm	3.38E-04
202	ALL	UCART1	315350	3924250	0.0015	1.4762E-07	40YrCancerDerived_InhSoilDerm	2.98E-04
203	ALL	UCART1	315450	3924250	0.0013	1.3162E-07	40YrCancerDerived_InhSoilDerm	2.66E-04
204	ALL	SCHOOL	315550	3924250	0.0012	1.1804E-07	40YrCancerDerived_InhSoilDerm	2.38E-04
205	ALL	SCHOOL	315650	3924250	0.0011	1.042E-07	40YrCancerDerived_InhSoilDerm	2.10E-04
206	ALL	UCART1	315750	3924250	0.0010	9.5066E-08	40YrCancerDerived_InhSoilDerm	1.92E-04
207	ALL	UCART1	313450	3924350	0.0056	5.5068E-07	40YrCancerDerived_InhSoilDerm	1.11E-03
208	ALL	UCART1	313550	3924350	0.0060	5.9473E-07	40YrCancerDerived_InhSoilDerm	1.20E-03
209	ALL	UCART1	313650	3924350	0.0066	6.5433E-07	40YrCancerDerived_InhSoilDerm	1.32E-03
210	ALL	UCART1	313750	3924350	0.0072	7.1221E-07	40YrCancerDerived_InhSoilDerm	1.44E-03
211	ALL	UCART1	313850	3924350	0.0078	7.7517E-07	40YrCancerDerived_InhSoilDerm	1.57E-03
212	ALL	UCART1	313950	3924350	0.0084	8.2819E-07	40YrCancerDerived_InhSoilDerm	1.67E-03
213	ALL	UCART1	314050	3924350	0.0089	8.8407E-07	40YrCancerDerived_InhSoilDerm	1.79E-03
214	ALL	UCART1	314150	3924350	0.0094	9.3335E-07	40YrCancerDerived_InhSoilDerm	1.89E-03
215	ALL	UCART1	314250	3924350	0.0089	8.8104E-07	40YrCancerDerived_InhSoilDerm	1.78E-03
216	ALL	UCART1	314350	3924350	0.0085	8.4411E-07	40YrCancerDerived_InhSoilDerm	1.70E-03
217	ALL	UCART1	314450	3924350	0.0079	7.8417E-07	40YrCancerDerived_InhSoilDerm	1.58E-03
218	ALL	UCART1	314550	3924350	0.0058	5.7584E-07	40YrCancerDerived_InhSoilDerm	1.16E-03
219	ALL	UCART1	315050	3924350	0.0024	2.4065E-07	40YrCancerDerived_InhSoilDerm	4.86E-04
220	ALL	UCART1	315150	3924350	0.0018	1.8311E-07	40YrCancerDerived_InhSoilDerm	3.70E-04
221	ALL	UCART1	315250	3924350	0.0015	1.5255E-07	40YrCancerDerived_InhSoilDerm	3.08E-04
222	ALL	UCART1	315350	3924350	0.0013	1.2987E-07	40YrCancerDerived_InhSoilDerm	2.62E-04
223	ALL	UCART1	315450	3924350	0.0012	1.1889E-07	40YrCancerDerived_InhSoilDerm	2.40E-04
224	ALL	UCART1	315550	3924350	0.0011	1.0551E-07	40YrCancerDerived_InhSoilDerm	2.13E-04
225	ALL	UCART1	315650	3924350	0.0010	9.7548E-08	40YrCancerDerived_InhSoilDerm	1.97E-04
226	ALL	UCART1	315750	3924350	0.0009	9.3441E-08	40YrCancerDerived_InhSoilDerm	1.89E-04
227	ALL	UCART1	313450	3924450	0.0054	5.3469E-07	40YrCancerDerived_InhSoilDerm	1.08E-03
228	ALL	UCART1	313550	3924450	0.0058	5.7025E-07	40YrCancerDerived_InhSoilDerm	1.15E-03
229	ALL	UCART1	313650	3924450	0.0061	6.0392E-07	40YrCancerDerived_InhSoilDerm	1.22E-03
230	ALL	UCART1	313750	3924450	0.0065	6.4486E-07	40YrCancerDerived_InhSoilDerm	1.30E-03
231	ALL	UCART1	313850	3924450	0.0067	6.5932E-07	40YrCancerDerived_InhSoilDerm	1.33E-03
232	ALL	UCART1	313950	3924450	0.0068	6.7169E-07	40YrCancerDerived_InhSoilDerm	1.36E-03
233	ALL	UCART1	314050	3924450	0.0068	6.7506E-07	40YrCancerDerived_InhSoilDerm	1.36E-03
234	ALL	UCART1	314150	3924450	0.0068	6.703E-07	40YrCancerDerived_InhSoilDerm	1.35E-03
235	ALL	UCART1	314250	3924450	0.0062	6.1274E-07	40YrCancerDerived_InhSoilDerm	1.24E-03
236	ALL	UCART1	314350	3924450	0.0057	5.638E-07	40YrCancerDerived_InhSoilDerm	1.14E-03
237	ALL	UCART1	314450	3924450	0.0049	4.8831E-07	40YrCancerDerived_InhSoilDerm	9.86E-04
238	ALL	UCART1	314550	3924450	0.0041	4.091E-07	40YrCancerDerived_InhSoilDerm	8.26E-04
239	ALL	UCART1	315050	3924450	0.0021	2.0525E-07	40YrCancerDerived_InhSoilDerm	4.15E-04
240	ALL	UCART1	315150	3924450	0.0017	1.6391E-07	40YrCancerDerived_InhSoilDerm	3.31E-04
241	ALL	UCART1	315250	3924450	0.0014	1.4076E-07	40YrCancerDerived_InhSoilDerm	2.84E-04
242	ALL	UCART1	315350	3924450	0.0012	1.2118E-07	40YrCancerDerived_InhSoilDerm	2.45E-04
243	ALL	UCART1	315450	3924450	0.0011	1.1172E-07	40YrCancerDerived_InhSoilDerm	2.26E-04
244	ALL	UCART1	315550	3924450	0.0010	9.7612E-08	40YrCancerDerived_InhSoilDerm	1.97E-04
245	ALL	UCART1	315650	3924450	0.0009	9.1485E-08	40YrCancerDerived_InhSoilDerm	1.85E-04
246	ALL	UCART1	315750	3924450	0.0009	8.6917E-08	40YrCancerDerived_InhSoilDerm	1.76E-04
247	ALL	UCART1	313450	3924550	0.0051	5.0196E-07	40YrCancerDerived_InhSoilDerm	1.01E-03
248	ALL	UCART1	313550	3924550	0.0052	5.1499E-07	40YrCancerDerived_InhSoilDerm	1.04E-03
249	ALL	UCART1	313650	3924550	0.0054	5.3777E-07	40YrCancerDerived_InhSoilDerm	1.09E-03
250	ALL	UCART1	313750	3924550	0.0056	5.5094E-07	40YrCancerDerived_InhSoilDerm	1.11E-03
251	ALL	UCART1	313850	3924550	0.0056	5.5463E-07	40YrCancerDerived_InhSoilDerm	1.12E-03
252	ALL	UCART1	313950	3924550	0.0055	5.4887E-07	40YrCancerDerived_InhSoilDerm	1.11E-03
253	ALL	UCART1	314050	3924550	0.0054	5.3506E-07	40YrCancerDerived_InhSoilDerm	1.08E-03
254	ALL	UCART1	314150	3924550	0.0052	5.1955E-07	40YrCancerDerived_InhSoilDerm	1.05E-03
255	ALL	UCART1	314250	3924550	0.0047	4.6672E-07	40YrCancerDerived_InhSoilDerm	9.43E-04
256	ALL	UCART1	314350	3924550	0.0043	4.2879E-07	40YrCancerDerived_InhSoilDerm	8.66E-04
257	ALL	UCART1	314450	3924550	0.0039	3.8739E-07	40YrCancerDerived_InhSoilDerm	7.82E-04
258	ALL	UCART1	314550	3924550	0.0035	3.4276E-07	40YrCancerDerived_InhSoilDerm	6.92E-04
259	ALL	UCART1	315050	3924550	0.0018	1.8163E-07	40YrCancerDerived_InhSoilDerm	3.67E-04
260	ALL	UCART1	315150	3924550	0.0015	1.4496E-07	40YrCancerDerived_InhSoilDerm	2.93E-04
261	ALL	UCART1	315250	3924550	0.0013	1.2399E-07	40YrCancerDerived_InhSoilDerm	2.50E-04
262	ALL	UCART1	315350	3924550	0.0012	1.1614E-07	40YrCancerDerived_InhSoilDerm	2.35E-04
263	ALL	UCART1	315450	3924550	0.0011	1.0715E-07	40YrCancerDerived_InhSoilDerm	2.16E-04
264	ALL	UCART1	315550	3924550	0.0010	9.4578E-08	40YrCancerDerived_InhSoilDerm	1.91E-04
265	ALL	UCART1	315650	3924550	0.0009	9.0781E-08	40YrCancerDerived_InhSoilDerm	1.83E-04
266	ALL	UCART1	315750	3924550	0.0008	8.1059E-08	40YrCancerDerived_InhSoilDerm	1.64E-04
267	ALL	UCART1	313450	3924650	0.0046	4.5162E-07	40YrCancerDerived_InhSoilDerm	9.12E-04
268	ALL	UCART1	313550	3924650	0.0046	4.5939E-07	40YrCancerDerived_InhSoilDerm	9.28E-04
269	ALL	UCART1	313650	3924650	0.0047	4.6613E-07	40YrCancerDerived_InhSoilDerm	9.41E-04
270	ALL	UCART1	313750	3924650	0.0048	4.7087E-07	40YrCancerDerived_InhSoilDerm	9.51E-04
271	ALL	UCART1	313850	3924650	0.0047	4.6404E-07	40YrCancerDerived_InhSoilDerm	9.37E-04
272	ALL	UCART1	313950	3924650	0.0046	4.563E-07	40YrCancerDerived_InhSoilDerm	9.22E-04
273	ALL	UCART1	314050	3924650	0.0044	4.3636E-07	40YrCancerDerived_InhSoilDerm	8.81E-04
274	ALL	UCART1	314150	3924650	0.0044	4.3738E-07	40YrCancerDerived_InhSoilDerm	8.83E-04
275	ALL	UCART1	314250	3924650	0.0040	3.9878E-07	40YrCancerDerived_InhSoilDerm	8.05E-04
276	ALL	UCART1	314350	3924650	0.0038	3.7646E-07	40YrCancerDerived_InhSoilDerm	7.60E-04
277	ALL	UCART1	314450	3924650	0.0035	3.4875E-07	40YrCancerDerived_InhSoilDerm	7.04E-04
278	ALL	UCART1	314550	3924650	0.0032	3.2006E-07	40YrCancerDerived_InhSoilDerm	6.46E-04
279	ALL	UCART1	315050	3924650	0.0015	1.5142E-07	40YrCancerDerived_InhSoilDerm	3.06E-04
280	ALL	UCART1	315150	3924650	0.0013	1.2702E-07	40YrCancerDerived_InhSoilDerm	2.57E-04
281	ALL	UCART1	315250	3924650	0.0011	1.1222E-07	40YrCancerDerived_InhSoilDerm	2.27E-04
282	ALL	UCART1	315350	3924650	0.0010	1.0367E-07	40YrCancerDerived_InhSoilDerm	2.09E-04
283	ALL	UCART1	315450	3924650	0.0010	9.6399E-08	40YrCancerDerived_InhSoilDerm	1.95E-04
284	ALL	UCART1	315550	3924650	0.0009	9.3676E-08	40YrCancerDerived_InhSoilDerm	1.89E-04
285	ALL	UCART1	315650	3924650	0.0009	8.7817E-08	40YrCancerDerived_InhSoilDerm	1.77E-04
286	ALL	UCART1	315750	3924650	0.0008	7.823E-08	40YrCancerDerived_InhSoilDerm	1.58E-04
287	ALL	UCART1	313550	3924750	0.0041	4.0507E-07	40YrCancerDerived_InhSoilDerm	8.18E-04
288	ALL	UCART1	313650	3924750	0.0041	4.0526E-07	40YrCancerDerived_InhSoilDerm	8.19E-04
289	ALL	UCART1	313750	3924750	0.0040	3.9876E-07	40YrCancerDerived_InhSoilDerm	8.05E-04
290	ALL	UCART1	313850	3924750	0.0040	3.9538E-07	40YrCancerDerived_InhSoilDerm	7.99E-04
291	ALL	UCART1	313950	3924750	0.0038	3.7968E-07	40YrCancerDerived_InhSoilDerm	7.67E-04
292	ALL	UCART1	314050	3924750	0.0037	3.6661E-07	40YrCancerDerived_InhSoilDerm	7.40E-04
293	ALL	UCART1	314150	3924750	0.0037	3.6352E-07	40YrCancerDerived_InhSoilDerm	7.34E-04
294	ALL	UCART1	314250	3924750	0.0035	3.4423E-07	40YrCancerDerived_InhSoilDerm	6.95E-04
295	ALL	UCART1	314350	3924750	0.0033	3.2758E-07	40YrCancerDerived_InhSoilDerm	6.62E-04
296	ALL	UCART1	314450	3924750	0.0030	3.0023E-07	40YrCancerDerived_InhSoilDerm	6.06E-04
297	ALL	UCART1	314550	3924750	0.0028	2.7552E-07	40YrCancerDerived_InhSoilDerm	5.56E-04
298	ALL	UCART1	314650	3924750	0.0024	2.3862E-07	40YrCancerDerived_InhSoilDerm	4.82E-04
299	ALL	UCART1	314750	3924750	0.0022	2.2234E-07	40YrCancerDerived_InhSoilDerm	4.49E-04
300	ALL	UCART1	314850	3924750	0.0018	0.000000183	40YrCancerDerived_InhSoilDerm	3.70E-04
301	ALL	UCART1	314950	3924750	0.0015	1.4876E-07	40YrCancerDerived_InhSoilDerm	3.00E-04
302	ALL	UCART1	315050	3924750	0.0013	1.2639E-07	40YrCancerDerived_InhSoilDerm	2.55E-04
303	ALL	UCART1	315150	3924750	0.0011	1.1186E-07	40YrCancerDerived_InhSoilDerm	2.26E-04
304	ALL	UCART1	315250	3924750	0.0010	1.0388E-07	40YrCancerDerived_InhSoilDerm	2.10E-04

HARP File Name

*HARP - HRACalc v22118 10/29/2025 2:23:09 PM - Cancer Risk - Input File: F:\Jobs\59010001\OpHRA\HARPOpsUNMIT1\hra\Worker_UnmitHRAInput.hra

REC	GRP	NETID	X	Y	CONC	RISK_SUM	SCENARIO	MAXHI
305	ALL	UCART1	315350	3924750	0.0010	9.6034E-08	40YrCancerDerived_InhSoilDerm	1.94E-04
306	ALL	UCART1	315450	3924750	0.0009	9.1635E-08	40YrCancerDerived_InhSoilDerm	1.85E-04
307	ALL	UCART1	315550	3924750	0.0009	8.4361E-08	40YrCancerDerived_InhSoilDerm	1.70E-04
308	ALL	UCART1	315650	3924750	0.0008	8.1548E-08	40YrCancerDerived_InhSoilDerm	1.65E-04
309	ALL	UCART1	315750	3924750	0.0008	7.6661E-08	40YrCancerDerived_InhSoilDerm	1.55E-04
310	ALL	UCART1	313650	3924850	0.0036	3.5179E-07	40YrCancerDerived_InhSoilDerm	7.11E-04
311	ALL	UCART1	313750	3924850	0.0035	3.4674E-07	40YrCancerDerived_InhSoilDerm	7.00E-04
312	ALL	UCART1	313850	3924850	0.0034	3.3927E-07	40YrCancerDerived_InhSoilDerm	6.85E-04
313	ALL	UCART1	313950	3924850	0.0032	3.1784E-07	40YrCancerDerived_InhSoilDerm	6.42E-04
314	ALL	UCART1	314050	3924850	0.0031	3.0352E-07	40YrCancerDerived_InhSoilDerm	6.13E-04
315	ALL	UCART1	314150	3924850	0.0029	2.8273E-07	40YrCancerDerived_InhSoilDerm	5.71E-04
316	ALL	UCART1	314250	3924850	0.0027	2.6606E-07	40YrCancerDerived_InhSoilDerm	5.37E-04
317	ALL	UCART1	314350	3924850	0.0026	2.5672E-07	40YrCancerDerived_InhSoilDerm	5.19E-04
318	ALL	UCART1	314450	3924850	0.0024	2.3285E-07	40YrCancerDerived_InhSoilDerm	4.70E-04
319	ALL	UCART1	314550	3924850	0.0022	2.1388E-07	40YrCancerDerived_InhSoilDerm	4.32E-04
320	ALL	UCART1	314650	3924850	0.0019	1.8949E-07	40YrCancerDerived_InhSoilDerm	3.83E-04
321	ALL	UCART1	314750	3924850	0.0017	1.6726E-07	40YrCancerDerived_InhSoilDerm	3.38E-04
322	ALL	UCART1	314850	3924850	0.0014	1.422E-07	40YrCancerDerived_InhSoilDerm	2.87E-04
323	ALL	UCART1	314950	3924850	0.0012	1.2178E-07	40YrCancerDerived_InhSoilDerm	2.46E-04
324	ALL	UCART1	315050	3924850	0.0011	1.1299E-07	40YrCancerDerived_InhSoilDerm	2.28E-04
325	ALL	UCART1	315150	3924850	0.0011	1.0432E-07	40YrCancerDerived_InhSoilDerm	2.11E-04
326	ALL	UCART1	315250	3924850	0.0010	9.5519E-08	40YrCancerDerived_InhSoilDerm	1.93E-04
327	ALL	UCART1	315350	3924850	0.0009	8.8089E-08	40YrCancerDerived_InhSoilDerm	1.78E-04
328	ALL	UCART1	315450	3924850	0.0009	8.5787E-08	40YrCancerDerived_InhSoilDerm	1.73E-04
329	ALL	UCART1	315550	3924850	0.0008	8.0254E-08	40YrCancerDerived_InhSoilDerm	1.62E-04
330	ALL	UCART1	315650	3924850	0.0007	7.4152E-08	40YrCancerDerived_InhSoilDerm	1.50E-04
331	ALL	UCART1	315750	3924850	0.0007	7.0095E-08	40YrCancerDerived_InhSoilDerm	1.42E-04
332	ALL	UCART1	313750	3924950	0.0031	3.0445E-07	40YrCancerDerived_InhSoilDerm	6.15E-04
333	ALL	UCART1	313850	3924950	0.0029	2.8603E-07	40YrCancerDerived_InhSoilDerm	5.78E-04
334	ALL	UCART1	313950	3924950	0.0028	2.7278E-07	40YrCancerDerived_InhSoilDerm	5.51E-04
335	ALL	UCART1	314050	3924950	0.0026	2.5672E-07	40YrCancerDerived_InhSoilDerm	5.19E-04
336	ALL	UCART1	314150	3924950	0.0024	2.3586E-07	40YrCancerDerived_InhSoilDerm	4.76E-04
337	ALL	UCART1	314250	3924950	0.0022	2.2257E-07	40YrCancerDerived_InhSoilDerm	4.50E-04
338	ALL	UCART1	314350	3924950	0.0022	2.1568E-07	40YrCancerDerived_InhSoilDerm	4.36E-04
339	ALL	UCART1	314450	3924950	0.0020	1.9417E-07	40YrCancerDerived_InhSoilDerm	3.92E-04
340	ALL	UCART1	314550	3924950	0.0019	1.8324E-07	40YrCancerDerived_InhSoilDerm	3.70E-04
341	ALL	UCART1	314650	3924950	0.0017	1.6765E-07	40YrCancerDerived_InhSoilDerm	3.39E-04
342	ALL	UCART1	314750	3924950	0.0014	1.4301E-07	40YrCancerDerived_InhSoilDerm	2.89E-04
343	ALL	UCART1	314850	3924950	0.0013	1.3041E-07	40YrCancerDerived_InhSoilDerm	2.63E-04
344	ALL	UCART1	314950	3924950	0.0011	1.1003E-07	40YrCancerDerived_InhSoilDerm	2.22E-04
345	ALL	UCART1	315050	3924950	0.0010	1.0257E-07	40YrCancerDerived_InhSoilDerm	2.07E-04
346	ALL	UCART1	315150	3924950	0.0010	9.6209E-08	40YrCancerDerived_InhSoilDerm	1.94E-04
347	ALL	UCART1	315250	3924950	0.0009	8.9626E-08	40YrCancerDerived_InhSoilDerm	1.81E-04
348	ALL	UCART1	315350	3924950	0.0008	8.2832E-08	40YrCancerDerived_InhSoilDerm	1.67E-04
349	ALL	UCART1	315450	3924950	0.0008	7.7951E-08	40YrCancerDerived_InhSoilDerm	1.57E-04
350	ALL	UCART1	315550	3924950	0.0008	7.6865E-08	40YrCancerDerived_InhSoilDerm	1.55E-04
351	ALL	UCART1	315650	3924950	0.0007	6.8987E-08	40YrCancerDerived_InhSoilDerm	1.39E-04
352	ALL	UCART1	313950	3925050	0.0024	2.3686E-07	40YrCancerDerived_InhSoilDerm	4.78E-04
353	ALL	UCART1	314050	3925050	0.0022	2.1905E-07	40YrCancerDerived_InhSoilDerm	4.42E-04
354	ALL	UCART1	314150	3925050	0.0021	2.0553E-07	40YrCancerDerived_InhSoilDerm	4.15E-04
355	ALL	UCART1	314250	3925050	0.0019	1.9114E-07	40YrCancerDerived_InhSoilDerm	3.86E-04
356	ALL	UCART1	314350	3925050	0.0019	1.8507E-07	40YrCancerDerived_InhSoilDerm	3.74E-04
357	ALL	UCART1	314450	3925050	0.0017	1.6682E-07	40YrCancerDerived_InhSoilDerm	3.37E-04
358	ALL	UCART1	314550	3925050	0.0016	1.5983E-07	40YrCancerDerived_InhSoilDerm	3.23E-04
359	ALL	UCART1	314650	3925050	0.0015	1.4873E-07	40YrCancerDerived_InhSoilDerm	3.00E-04
360	ALL	UCART1	314750	3925050	0.0013	1.2475E-07	40YrCancerDerived_InhSoilDerm	2.52E-04
361	ALL	UCART1	314850	3925050	0.0012	1.1833E-07	40YrCancerDerived_InhSoilDerm	2.39E-04
362	ALL	UCART1	314950	3925050	0.0010	1.015E-07	40YrCancerDerived_InhSoilDerm	2.05E-04
363	ALL	UCART1	315050	3925050	0.0010	9.4896E-08	40YrCancerDerived_InhSoilDerm	1.92E-04
364	ALL	UCART1	315150	3925050	0.0009	8.7822E-08	40YrCancerDerived_InhSoilDerm	1.77E-04
365	ALL	UCART1	315250	3925050	0.0008	8.2861E-08	40YrCancerDerived_InhSoilDerm	1.67E-04
366	ALL	UCART1	315350	3925050	0.0008	7.8877E-08	40YrCancerDerived_InhSoilDerm	1.59E-04
367	ALL	UCART1	315450	3925050	0.0007	7.3207E-08	40YrCancerDerived_InhSoilDerm	1.48E-04
368	ALL	UCART1	315550	3925050	0.0007	6.9041E-08	40YrCancerDerived_InhSoilDerm	1.39E-04
369	ALL	UCART1	315650	3925050	0.0007	6.8842E-08	40YrCancerDerived_InhSoilDerm	1.39E-04
370	ALL	UCART1	314050	3925150	0.0020	1.9563E-07	40YrCancerDerived_InhSoilDerm	3.95E-04
371	ALL	UCART1	314150	3925150	0.0019	1.8383E-07	40YrCancerDerived_InhSoilDerm	3.71E-04
372	ALL	UCART1	314250	3925150	0.0018	1.7403E-07	40YrCancerDerived_InhSoilDerm	3.52E-04
373	ALL	UCART1	314350	3925150	0.0017	1.7132E-07	40YrCancerDerived_InhSoilDerm	3.46E-04
374	ALL	UCART1	314450	3925150	0.0015	1.5339E-07	40YrCancerDerived_InhSoilDerm	3.10E-04
375	ALL	UCART1	314550	3925150	0.0015	1.4787E-07	40YrCancerDerived_InhSoilDerm	2.99E-04
376	ALL	UCART1	314650	3925150	0.0014	1.3817E-07	40YrCancerDerived_InhSoilDerm	2.79E-04
377	ALL	UCART1	314750	3925150	0.0012	1.1739E-07	40YrCancerDerived_InhSoilDerm	2.37E-04
378	ALL	UCART1	314850	3925150	0.0011	1.0874E-07	40YrCancerDerived_InhSoilDerm	2.20E-04
379	ALL	UCART1	314950	3925150	0.0010	9.6428E-08	40YrCancerDerived_InhSoilDerm	1.95E-04
380	ALL	UCART1	315050	3925150	0.0009	8.4774E-08	40YrCancerDerived_InhSoilDerm	1.71E-04
381	ALL	UCART1	315150	3925150	0.0008	8.0123E-08	40YrCancerDerived_InhSoilDerm	1.62E-04
382	ALL	UCART1	315250	3925150	0.0008	7.5961E-08	40YrCancerDerived_InhSoilDerm	1.53E-04
383	ALL	UCART1	315350	3925150	0.0007	7.132E-08	40YrCancerDerived_InhSoilDerm	1.44E-04
384	ALL	UCART1	315450	3925150	0.0007	6.9036E-08	40YrCancerDerived_InhSoilDerm	1.39E-04
385	ALL	UCART1	315550	3925150	0.0006	6.4208E-08	40YrCancerDerived_InhSoilDerm	1.30E-04
386	ALL	UCART1	314150	3925250	0.0017	1.6456E-07	40YrCancerDerived_InhSoilDerm	3.32E-04
387	ALL	UCART1	314250	3925250	0.0016	1.5662E-07	40YrCancerDerived_InhSoilDerm	3.16E-04
388	ALL	UCART1	314350	3925250	0.0016	1.5372E-07	40YrCancerDerived_InhSoilDerm	3.10E-04
389	ALL	UCART1	314450	3925250	0.0014	1.408E-07	40YrCancerDerived_InhSoilDerm	2.84E-04
390	ALL	UCART1	314550	3925250	0.0014	1.3739E-07	40YrCancerDerived_InhSoilDerm	2.78E-04
391	ALL	UCART1	314650	3925250	0.0013	1.2829E-07	40YrCancerDerived_InhSoilDerm	2.59E-04
392	ALL	UCART1	314750	3925250	0.0012	1.1495E-07	40YrCancerDerived_InhSoilDerm	2.32E-04
393	ALL	UCART1	314850	3925250	0.0010	9.7304E-08	40YrCancerDerived_InhSoilDerm	1.97E-04
394	ALL	UCART1	314950	3925250	0.0009	8.9923E-08	40YrCancerDerived_InhSoilDerm	1.82E-04
395	ALL	UCART1	315050	3925250	0.0008	8.3113E-08	40YrCancerDerived_InhSoilDerm	1.68E-04
396	ALL	UCART1	315150	3925250	0.0008	7.8666E-08	40YrCancerDerived_InhSoilDerm	1.59E-04
397	ALL	UCART1	315250	3925250	0.0008	7.4332E-08	40YrCancerDerived_InhSoilDerm	1.50E-04
398	ALL	UCART1	315350	3925250	0.0007	7.1676E-08	40YrCancerDerived_InhSoilDerm	1.45E-04
399	ALL	UCART1	315450	3925250	0.0006	5.9477E-08	40YrCancerDerived_InhSoilDerm	1.20E-04
400	ALL	UCART1	314250	3925350	0.0014	1.4031E-07	40YrCancerDerived_InhSoilDerm	2.83E-04
401	ALL	UCART1	314350	3925350	0.0014	1.3744E-07	40YrCancerDerived_InhSoilDerm	2.78E-04
402	ALL	UCART1	314450	3925350	0.0012	1.2191E-07	40YrCancerDerived_InhSoilDerm	2.46E-04
403	ALL	UCART1	314550	3925350	0.0012	1.1882E-07	40YrCancerDerived_InhSoilDerm	2.40E-04
404	ALL	UCART1	314650	3925350	0.0011	1.1211E-07	40YrCancerDerived_InhSoilDerm	2.26E-04
405	ALL	UCART1	314750	3925350	0.0010	1.0386E-07	40YrCancerDerived_InhSoilDerm	2.10E-04
406	ALL	UCART1	314850	3925350	0.0009	8.9429E-08	40YrCancerDerived_InhSoilDerm	1.81E-04
407	ALL	UCART1	314950	3925350	0.0009	8.6307E-08	40YrCancerDerived_InhSoilDerm	1.74E-04
408	ALL	UCART1	315050	3925350	0.0008	7.7976E-08	40YrCancerDerived_InhSoilDerm	1.57E-04
409	ALL	UCART1	315150	3925350	0.0007	6.7858E-08	40YrCancerDerived_InhSoilDerm	1.37E-04
410	ALL	UCART1	315250	3925350	0.0007	7.0833E-08	40YrCancerDerived_InhSoilDerm	1.43E-04
411	ALL	UCART1	315350	3925350	0.0007	6.6053E-08	40YrCancerDerived_InhSoilDerm	1.33E-04

HARP File Name

*HARP - HRACalc v22118 10/29/2025 2:23:09 PM - Cancer Risk - Input File: F:\Jobs\59010001\OpHRA\HARPOpsUNMIT1\hra\Worker_UnmitHRAInput.hra

REC	GRP	NETID	X	Y	CONC	RISK_SUM	SCENARIO	MAXHI
412	ALL	UCART1	314450	3925450	0.0011	1.1225E-07	40YrCancerDerived_InhSoilDerm	2.27E-04
413	ALL	UCART1	314550	3925450	0.0011	1.0722E-07	40YrCancerDerived_InhSoilDerm	2.17E-04
414	ALL	UCART1	314650	3925450	0.0010	1.0124E-07	40YrCancerDerived_InhSoilDerm	2.04E-04
415	ALL	UCART1	314750	3925450	0.0010	9.7044E-08	40YrCancerDerived_InhSoilDerm	1.96E-04
416	ALL	UCART1	314850	3925450	0.0009	8.5945E-08	40YrCancerDerived_InhSoilDerm	1.74E-04
417	ALL	UCART1	314950	3925450	0.0008	7.9925E-08	40YrCancerDerived_InhSoilDerm	1.61E-04
418	ALL	UCART1	315050	3925450	0.0007	7.4117E-08	40YrCancerDerived_InhSoilDerm	1.50E-04
419	ALL	UCART1	315150	3925450	0.0007	6.8593E-08	40YrCancerDerived_InhSoilDerm	1.39E-04
420	ALL	UCART1	315250	3925450	0.0006	6.1279E-08	40YrCancerDerived_InhSoilDerm	1.24E-04
546	ALL	NON-RES	314074	3923738	0.0082	8.0744E-07	40YrCancerDerived_InhSoilDerm	1.63E-03
547	ALL		314152	3923719	0.0087	8.6488E-07	40YrCancerDerived_InhSoilDerm	1.75E-03
548	ALL		314280	3923708	0.0119	1.1777E-06	40YrCancerDerived_InhSoilDerm	2.38E-03
549	ALL		314624	3923582	0.0124	1.2268E-06	40YrCancerDerived_InhSoilDerm	2.48E-03
550	ALL		314388	3923589	0.0104	1.0284E-06	40YrCancerDerived_InhSoilDerm	2.08E-03
551	ALL		314278	3923589	0.0086	8.5556E-07	40YrCancerDerived_InhSoilDerm	1.73E-03
552	ALL		314193	3923588	0.0073	7.1834E-07	40YrCancerDerived_InhSoilDerm	1.45E-03

Airport Commerce Center Industrial Project

Construction Energy Summary

Phase/Building Area	Off-Road Construction Equipment	On-Road Vehicles [1] (Workers and Vendors)	Vendor and Worker VMT
		1,497	23,435
Building 1 and 2	45,374	55,873	987,547
Building 3	38,367	22,632	405,067
Building 4	109.426	108,979	1,923,363
Roadway Improvements	15,127	6,588	136,644
	120,602	195,569	3,476,056

Notes:

1 Fuel for on-road construction vehicles is combined gasoline and diesel.

Airport Commerce Center - Building Operations

5.11. Operational Energy Consumption

5.11.1 Unmitigated

Land Use	Electricity (kWh/yr)
Unrefrigerated Warehouse-No Rail	2869651
Manufacturing	2375268
Manufacturing	2222240
Unrefrigerated Warehouse-No Rail	4865986
Refrigerated Warehouse-No Rail	12840515
Fast Food Restaurant with Drive Thru	425315
	25,598,975

Airport Commerce Center - Vehicle Operations

Energy Calculations - Operations Fuel Use from Mobile Sources

Region Kern-San Joaquin
OpYear 2028

Fuel Consumption by Vehicle Category - Annual Usage (gallons ; KWh-hr for Electicity)

Units	All vehicles	HHDT	LDA	LDT1	LDT2	LHD1	LHD2	MCY	MDV	MH	MHDT	OBUS	SBUS	UBUS
Gasoline	**1,246,074**	235	391188	41350	258128	25670	5453	6984	267192	7177	241113	1131	294	157
Diesel	**4,543,817**	3160068	510	4	616	13869	7769		3151	1941	1353244	374	2202	68
Natural Gas	**84,696**	67481									16103	10	662	438
Electricity	**1,871,356**	847027	349669	2059	34074	6349	1562		36074		592922	117	562	942

EMFAC Default Mix- County Popuation	VMT	HHDT	LDA	LDT1	LDT2	LHDT1	LHDT2	MCY	MDV	MH	MHDT	OBUS	SBUS	UBUS
Kern-San Joaquin County Population	**724,685**	28,219	314,623	25,448	160,475	24,358	7,594	14,685	133,128	2,481	11,735	418	1,264	257
Vehicle Mix Default	**1**	3.9%	43.4%	3.5%	22.1%	3.4%	1.0%	2.0%	18.4%	0.3%	1.6%	0.1%	0.2%	0.0%

Vehicle Types /Mix in CalEEMod	VMT	HHDT	LDA	LDT1	LDT2	LHDT1	LHDT2	MCY	MDV	MH	MHDT	OBUS	SBUS	UBUS
User Defined Industrial	34,587,400	1									1			
User Defined Commercial	10,057,093		1	1	1				1					
User Defined Recreational	6,762,003		1	1	1				1					

Vehicle Percentages Modeled	VMT	HHDT	LDA	LDT1	LDT2	LHDT1	LHDT2	MCY	MDV	MH	MHDT	OBUS	SBUS	UBUS
User Defined Industrial	34,587,400	60.3%									39.7%			
User Defined Commercial	10,057,093		43.4%	3.5%	22.1%				18.4%					
User Defined Recreational	6,762,003		43.4%	3.5%	22.1%				18.4%					

User Defined Industrial — **Fuel Consumption by Vehicle Category**

Fuel Consumption for CVMT	Units	HHDT	LDA	LDT1	LDT2	LHD1	LHD2	MCY	MDV	MH	MHDT	OBUS	SBUS	UBUS
Gasoline	**gal**	229									237036			
Diesel	**gal**	3076286									1330359			
Natural Gas	**gal**	65692									15831			
Fuel Consumption for EVMT	**Units**	**HHDT**	**LDA**	**LDT1**	**LDT2**	**LHD1**	**LHD2**	**MCY**	**MDV**	**MH**	**MHDT**	**OBUS**	**SBUS**	**UBUS**
Electricity	**kwhr**	824570									582895			

User Defined Commercial — **Fuel Consumption by Vehicle Category**

Fuel Consumption for CVMT	Units	HHDT	LDA	LDT1	LDT2	LHD1	LHD2	MCY	MDV	MH	MHDT	OBUS	SBUS	UBUS
Gasoline	**gal**		123131	13221	82253				85273					
Diesel	**gal**		163	1	197				1009					
Plug-in Hybrid (Gasoline)	**gal**		2139	21	407				290					
Fuel Consumption for EVMT	**Units**	**HHDT**	**LDA**	**LDT1**	**LDT2**	**LHD1**	**LHD2**	**MCY**	**MDV**	**MH**	**MHDT**	**OBUS**	**SBUS**	**UBUS**
Electricity	**kwhr**		111974	659	10911				11552					
Plug-in Hybrid (Electricity)	**kwhr**		23485	263	4809				3250					

User Defined Recreational — **Fuel Consumption by Vehicle Category**

Fuel Consumption for CVMT	Units	HHDT	LDA	LDT1	LDT2	LHD1	LHD2	MCY	MDV	MH	MHDT	OBUS	SBUS	UBUS
Gasoline	**gal**		82788	8889	55304				57334					
Diesel	**gal**		110	1	133				678					
Plug-in Hybrid (Gasoline)	**gal**		1438	14	274				195					
Fuel Consumption for EVMT	**Units**	**HHDT**	**LDA**	**LDT1**	**LDT2**	**LHD1**	**LHD2**	**MCY**	**MDV**	**MH**	**MHDT**	**OBUS**	**SBUS**	**UBUS**
Electricity	**kwhr**		75287	443	7336				7767					
Plug-in Hybrid (Electricity)	**kwhr**		15791	177	3233				2185					

Airport Commerce Center - TRU Operations

Off-Road Equipment - Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	TRU Trucks per Day	Hours Per Day	fuel (gal/hr)	Days	gal/yr
Operation	Transport Refrigeration Units- Truck	Diesel	Unspecified	53	0.9	0.554	365	9645
	Transport Refrigeration Units- Trailer	Diesel	Unspecified	80	1.6	0.695	365	32470
				133				42116

Phase Name	Equipment Type	Fuel Type	Engine Tier	TRU Trucks per Day	Hours Per Day	kWhr/unit	Days	kWh/year
Operation	Transport Refrigeration Units- Truck	Electic	Unspecified	53	0	7.3	365	0
	Transport Refrigeration Units- Trailer	Electic	Unspecified	80	0	7.3	365	0
				133				0

Airport Commerce Center - TRU Operations

Off-Road Equipment - Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	TRU Trucks per Day	Hours Per Day	fuel (gal/hr)	Days	gal/yr
Operation	Transport Refrigeration Units- Truck	Diesel	Unspecified	53	0.5	0.554	365	5359
	Transport Refrigeration Units- Trailer	Diesel	Unspecified	80	0.5	0.695	365	10147
				133				15506

Phase Name	Equipment Type	Fuel Type	Engine Tier	TRU Trucks per Day	Hours Per Day			kWh/yr
Operation	Transport Refrigeration Units- Truck	Electic	Unspecified	53	0.4	7.3	365	56487
	Transport Refrigeration Units- Trailer	Electic	Unspecified	80	1.1	7.3	365	234476
				133				290963

Site Location: Merle Haggard Drive & Airport Drive Oildale CA

Project Site Monitoring Data

Air Pollutant	Averaging Time	Item	2021	2022	2023
Ozone[1]	1 Hour	Max 1 Hour (ppm)	**0.107**	**0.106**	0.089
		Days > State Standard (0.09 ppm)	**6**	**4**	0
	8 Hour	Max 8 Hour (ppm)	**0.095**	**0.09**	**0.082**
		Days > Standard (0.070 ppm)	**43**	**51**	**13**
Nitrogen dioxide (NO_2)[1]	Annual	Annual Average (ppm)	*	0.022	0.019
	1 Hour	Max 1 Hour (ppm)	0.0677	0.0676	0.0558
		Days > State Standard (0.18 ppm)	0	0	0
Inhalable coarse particles (PM_{10})[2]	Annual	National Annual Average ($\mu g/m^3$)	**50**	**44.9**	**38.8**
	24 Hour	Highest State 24 Hour ($\mu g/m^3$)	**421.4**	**149.4**	**270.4**
		Days > State Standard (50 $\mu g/m^3$)	**129**	**127**	**102**
		Days > National Standard (150 $\mu g/m^3$)	**2**	0	**1**
Fine particulate matter ($PM_{2.5}$)[1]	Annual	State Annual Average (12 $\mu g/m^3$)	*	*	**13.6**
	24 Hour	Highest Daily 24 Hour ($\mu g/m^3$)	**78.5**	**58.6**	**58**
		Days > National Standard (35 $\mu g/m^3$)	**43**	**33**	**9**

Notes:
> = exceed
µg/m3 = micrograms per cubic meter
Bold = exceedance
max = maximum
National Standard = National Ambient Air Quality Standard
"*" = no data
ppm = parts per million
State Standard = California Ambient Air Quality Standard
1 Data is extracted from station at 3311 Manor Street, approxiamtely 1.4 miles from the project site.
2 Data is extracted from station a t 3311 Manor Street, approxiamtely 1.4 miles from the project site of the project site.
3 In February, 2024, the EPA announced the agency's proposed rule change of reducing the primary annual $PM_{2.5}$ National Ambient Air Quality Standard (NAAQS) from 12 $\mu g/m^3$ to 9 $\mu g/m^3$. Meanwhile, the monitoring data available before year 2024 would be compared with the previous standard of 12 $\mu g/m^3$.
Source: California Air Resources Board (ARB). Top Four Summary. Website: https://www.arb.ca.gov/adam/topfour/topfour1.php. Accessed April 17, 2025.

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