

Technical Memorandum



To: Scott Johnson, Principal Planner, City of Sacramento

From: Annalee Sanborn, Project Manager
Ryan Sawyer, AICP, Project Director

Date: October 14, 2025

Subject: Ramona Opportunity Industrial (DR24-195), Final IS/MND and Errata

The September 2025 Initial Study/Mitigated Negative Declaration (IS/MND) for the Ramona Opportunity Industrial Project (Proposed Project) was circulated for public comment from September 4, 2025, to October 6, 2025, in accordance with CEQA Guidelines Section 15073. A Notice of Availability/Intent (NOA/NOI) and the draft IS/MND were filed with the State Clearinghouse and circulated to interested parties to initiate the public review period in compliance with CEQA Guidelines Section 15072. Written comments were received as follows:

Letter	Date	Commentor
Agency Letters		
A1	9/11/25	Satwinder Dhatt, California Department of Transportation
A2	9/12/25	Tamara Purvis, Department of Toxic Substances Control
A3	10/2/25	Molly Wright, Sacramento Metropolitan Air Quality Management District
A4	10/3/25	Kamron Miller, Sacramento County Environmental Management Department
A5	10/3/25	Manjot Dhugga, Sacramento Area Sewer District
A6	10/6/25	Peter G. Minkel, Central Valley Regional Water Quality Control Board
A7	10/6/25	S. Jimenez, City of Sacramento Department of Utilities

The written comments are included as **Attachment A**. This memorandum includes responses to the substantive environmental issues raised in the comment letters and proposes minor clarifications or corrections to the September 2025 draft IS/MND. As explained in the responses below, the comments received did not identify any new significant effects, increase the severity of any impacts disclosed in the draft IS/MND, or provide new information that would alter the conclusions of the analysis. Additionally, the proposed minor clarifications or corrections to the September 2025 draft IS/MND do not constitute ‘substantial revisions’ under CEQA Guidelines Section 15073.5(b), which are defined as:

- “(b) A “substantial revision” of the negative declaration shall mean:
- (1) A new, avoidable significant effect is identified and mitigation measures or project revisions must be added in order to reduce the effect to insignificance, or

(2) The lead agency determines that the proposed mitigation measures or project revisions will not reduce potential effects to less than significance and new measures or revisions must be required.”

CEQA Guidelines Section 15073.5(c) states that “Recirculation is not required under the following circumstances:

- (1) Mitigation measures are replaced with equal or more effective measures pursuant to Section 15074.1.
- (2) New project revisions are added in response to written or verbal comments on the project’s effects identified in the proposed negative declaration which are not new avoidable significant effects.
- (3) Measures or conditions of project approval are added after circulation of the negative declaration which are not required by CEQA, which do not create new significant environmental effects and are not necessary to mitigate an avoidable significant effect.
- (4) New information is added to the negative declaration which merely clarifies, amplifies, or makes insignificant modifications to the negative declaration.”

The additional technical information and conditions of approval discussed in this final IS/MND do not reveal new significant impacts or increase the severity of a previously identified effect, and therefore the IS/MND does not require recirculation pursuant to CEQA Guidelines Section 15073.5(c).

Responses to Comment Letters

Comment Letter A1: California Department of Transportation

Response to Comment A1-1:

Comment noted.

Comment Letter A2: Department of Toxic Substances Control

Response to Comment A2-1:

The County of Sacramento Environmental Management Department (EMD) is the Local Enforcement Agency (LEA) for the California Department of Resources, Recycling, and Recovery (CalRecycle) and is a self-certified local agency as described in this comment. As the LEA, EMD reviewed the application materials and provided feedback on September 24, 2024, recommending that the “City condition... any habitable structure(s) associated with the project that will lie within 1000 feet of the waste boundary comply with the requirements of 27 CCR 21190(g), including geomembrane foundation layer, building venting, and automatic methane sensors and alarms to protect future occupants.” These requirements were incorporated into revised project design plans and Section 3.9.3 of the draft IS/MND describes that the Proposed Project will be subject to a Condition of Approval requiring compliance with California Code of Regulations (CCR) Title 27, Section 21190(g), as requested, which mandates design features—such as geomembrane barriers, venting systems, and gas monitoring—to prevent landfill gas intrusion. Should further oversight by a regulatory agency be determined to be necessary during site preparation activities, the LEA and/or CalRecycle would be consulted at that time. Note that the County as LEA has also provided comments on the September 2025 IS/MND, responses to which are provided under **Comment Letter A4**, below.

Response to Comment A2-2:

This comment is noted. The Proposed Project would be constructed in compliance with the CCR and all applicable building codes, and would obtain all necessary building and grading permits from the City prior to construction. There are currently no established standards in the statutes or regulations that address environmental requirements for imported fill material, per the DTSC's "Information Advisory Clean Imported Fill Material Fact Sheet" referenced in this comment. The project applicant has been informed of this best practice.

Comment Letter A3: Sacramento Metropolitan Air Quality Management District (SMAQMD)

Response to Comment A3-1:

In response to this comment, the Health Risk Assessment (HRA) was revised to utilize EMFAC 2021, which has been approved by the U.S. Environmental Protection Agency (USEPA). It should be noted that EMFAC 2025 is currently available for use but has not yet been approved by the USEPA. Using EMFAC 2021 is expected to provide a slightly more conservative analysis compared to EMFAC 2025 in terms of PM emissions. Where emission factors were not available in EMFAC 2021 (e.g., T7 Single Construction Vehicle Class), emissions from EMFAC 2017 were used. The revised HRA is included with this response to comments memo as **Appendix B** and, where necessary, updates have been made to the final IS/MND in the Errata below. The revised HRA and updates to the IS/MND do not reveal new significant impacts or change the conclusions or recommendations of the draft IS/MND, and therefore the IS/MND does not require recirculation pursuant to CEQA Guidelines Section 15073.5(c).

Response to Comment A3-2:

The HRA was revised to clarify the source of the daily truck generation estimate. Truck trips associated with the Proposed Project were derived from the Fontana Truck Trip Generation Study (August 2003). The Institute of Transportation Engineers (ITE) Trip Generation Handbook (12th Edition) Warehouse (Land Use 150) and General Light Industrial (Land Use 110) land uses yield a daily truck trip volume of 29 and 17, respectively, considering a square footage of 67,612. Truck trips derived from the Fontana Truck Trip Generation Study yield a greater daily truck trip volume for the Proposed Project. The Fontana Truck Trip Generation Study methodology was structured to follow procedures of the ITE trip generation manual, but with expanded result details that allow finer-resolution analyses. "This study contributes to the relatively limited information provided by the ITE trip generation manual on truck internal land uses by addressing several land uses that are not covered by this manual and by presenting vehicle trip generation rates with break down by axles." While the use of the ITE Trip Generation Handbook is appropriate for the traffic analysis accounting for passenger cars, the use of Fontana Truck Trip Generation Study which provides more detailed and more conservative (greater) values for truck trips results in a slightly more conservative analysis of potential health impacts due to large, idling trucks.

Response to Comment A3-3:

Estimated import and export of fill material was included in the CalEEMod inputs to provide an assessment of trucking of fill material. CalEEMod does not provide default fill material volumes, so the import/export estimates need to be provided. No other changes were made to the default dust from material movement default assumptions.

Response to Comment A3-4:

The HRA was revised to disclose and include particulate matter 2.5 microns in size (PM_{2.5}) emissions in the assessment of Proposed Project health risks to sensitive receptors in the vicinity of the Project Site. PM₁₀ and PM_{2.5} emissions estimates were quantified for the Proposed Project's construction and operational phases and were used collectively in the assessment of impacts to sensitive receptors. Values in the HRA emission quantification tables correspond to appropriate values in the IS/MND CalEEMod outputs and/or EMFAC worksheets (see Tables 4b, 5b, 6b and 9b of revised **Appendix B**). As shown in the revised HRA and the updated impact analysis presented in the Errata below, even with the modifications to the analysis methodology requested by the SMAQMD, the Proposed Project would not exceed any thresholds of significance and would not result in a significant impact to sensitive receptors.

Response to Comment A3-5:

The HRA was revised to clarify the emission factors used, as requested by this comment. Whereas Tables 4a and 4b identify emission factors for construction equipment without mitigation (default engines), Tables 9a and 9b identify the emission factors for construction equipment with mitigation (Tier 4 engines). The use of Tier 4 engines was required in the September 2025 IS/MND by Mitigation Measure AQ-2.

Response to Comment A3-6:

The HRA was revised as requested by this comment to include ambient air quality data from the closest SMAQMD Air Monitoring Station (see Table 3a of revised **Appendix B**).

Response to Comment A3-7:

The HRA was revised to utilize the phrase "Non-Cancer (Hazard Index)" rather than "Chronic Health Risk" to be consistent with SMAQMD terminology. The HRA was also revised to clarify that the SMAQMD threshold for stationary sources was also applied to mobile sources because SMAQMD has not established a significance threshold for mobile sources. See page 16 and Tables 8 and 14 of the revised HRA (**Appendix B**).

Response to Comment A3-8:

Impact c) of Section 3.3.4 of the draft IS/MND analyzes toxic air contaminant (TAC) emissions, including the proposed landscape plan (provided in Appendix A) against SMAQMD's Landscape Guidance document. This comment provides recommendations to expand the planting buffer in accordance with the standards in SMAQMD's Landscaping Guidance. Due to the limited size of the Project Site and site configuration, it is not feasible to widen the currently designed planting buffers, which range from 10 to 36 feet wide. The landscape plan does include a mixture of broad canopy trees and large evergreen shrubs, which is generally consistent with the recommendations of the Landscaping Guidance, and several of these proposed plantings are the recommended species (see Appendix A of the draft IS/MND for the landscape plan). To the extent feasible, while also meeting the City's Water Efficient Landscape Ordinance and shading requirements, vegetation species will be chosen from SMAQMD's Landscaping Guidance. The draft IS/MND concluded that, "in accordance with this [Landscape] guidance, tree species planted along the site perimeter would be selected for their effectiveness in filtering air pollutants and reducing airborne particulate matter, further reducing this already less-than-significant impact (SMAQMD, 2020c)." Pursuant to CEQA Guidelines Section 15126.4, this impact is already less than significant and new mitigation measures would not be considered "roughly proportional" to the impacts of the project. Nevertheless, the City may require as a Condition of Approval that tree species planted along the site perimeter be selected using the SMAQMD's Landscaping Guidance to the maximum extent feasible.

Similarly, the comment also provides a recommendation to post signage informing operators of diesel-powered equipment and vehicles of State-idling restrictions to minimize TAC emissions. Impact c) of Section 3.3.4 of the draft IS/MND did not identify a significant impact associated with TAC emissions, including with the revised HRA analysis contained herein (see revised **Appendix B** and the Errata sheets, below). Consistent with CEQA Guidelines Section 15126.4, a new mitigation measure requiring sign postage is not required to lessen a significant impact; nevertheless, the City may require the posting of a sign as a Condition of Approval, should the Proposed Project be approved.

Response to Comment A3-9:

This comment is noted. The Proposed Project would be constructed in compliance with all applicable building codes, as required through the City's building permitting review prior to construction.

Response to Comment A3-10:

This comment is noted. As described in Section 3.3.4 of the IS/MND, the Proposed Project would be required to comply with applicable SMAQMD rules and regulations. Additionally, the Basic Construction Emission Control Practices recommended by SMAQMD have been incorporated as Mitigation Measure AQ-1.

Comment Letter A4: County of Sacramento EMD

Response to Comment A4-1:

The applicant has been informed of the closed 14th Avenue Landfill, as well as the results of the Phase I and Phase II Environmental Site Assessment (ESA) results (Appendices E-1 and E-2 of the IS/MND). While no methane was detected during the Phase II ESA, benzene and trichloroethylene were identified in soil gas samples above screening levels, indicating a potential vapor intrusion concern. As described in Section 3.9.3 of the IS/MND, the Proposed Project would be required to comply with CCR Title 27, Section 21190(g), which mandates design features—such as geomembrane barriers, venting systems, and gas monitoring—to prevent landfill gas intrusion. These requirements would be implemented as part of the Project's Conditions of Approval during permitting.

Response to Comment A4-2:

Comment noted.

Response to Comment A4-3:

Comment noted. As discussed in Section 3.9.3 of the IS/MND, the Proposed Project would incorporate protective design measures consistent with CCR Title 27, Section 21190(g), including installation of automatic methane gas monitoring sensors and alarms within enclosed structures. These features are required as a Condition of Approval and would be verified through building permit review to ensure protection against landfill gas intrusion.

Comment Letter A5: Sacramento Area Sewer District

Response to Comment A5-1:

Comment noted.

Response to Comment A5-2:

The IS/MND has been revised to update all references to the “Sacramento Regional Wastewater Treatment Plant” and “SRWTP” to the facility’s current name, the EchoWater Resource Recovery Facility. In addition, all references to the “Sacramento Regional County Sanitation District,” “SASD,” and “Regional San” have been revised to use the updated name “Sacramento Area Sewer District (SacSewer).” These revisions have been applied consistently throughout the IS/MND. Documentation of the specific edits can be found in the Errata below.

Response to Comment A5-3:

The IS/MND has been revised to clarify that the Proposed Project would connect to SacSewer’s existing sewer system, rather than the City’s sewer system. This correction is reflected on page 45 of the IS/MND. Revisions to the IS/MND are documented in the Errata below.

Response to Comment A5-4:

Please refer to the **Response to Comment A5-2**, which addresses the requested revisions regarding the facility name update from “Sacramento Regional Wastewater Treatment Plant” to “EchoWater Resource Recovery Facility.”

Response to Comment A5-5:

Section 3.16.3 of the IS/MND has been revised to clarify that any sewer improvements required to connect the Proposed Project to SacSewer infrastructure must coordinate with SacSewer and be designed to meet SacSewer standards and specifications. Revisions to the IS/MND are documented in the Errata below.

Response to Comment A5-6:

The IS/MND has been revised to reflect updated wastewater flow values as requested. The IS/MND now includes current operational data from SacSewer, which reports that the EchoWater Resource Recovery Facility treated an average of 116 mgd in 2025. This update is supported by a new reference added to page 101 of the IS/MND. These revisions are documented in the Errata below.

Comment Letter A6: Central Valley Regional Water Quality Control Board

Response to Comment A6-1:

The Central Valley Regional Water Quality Control Board (RWQCB) comment outlines permitting requirements and regulatory programs related to potential discharges to surface and groundwater, including coverage under the Construction General Permit, Clean Water Act Sections 401 and 404, and Waste Discharge Requirements. As noted in Section 2.3.1 of the IS/MND, the Proposed Project would require coverage under the National Pollutant Discharge Elimination System (NPDES) Construction General Permit (Order No. 2022-0057-DWQ) prior to construction. Preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) would be required to comply with this permit and ensure protection of water quality during construction activities.

The IS/MND Section 3.4 and Section 3.10, Biological Resources and Hydrology and Water Quality, respectively, concluded that no jurisdictional waters or wetlands occur within the Project Site. Therefore, the Proposed Project would not require a Clean Water Act Section 404 permit, a Section 401 Water Quality Certification, or Waste Discharge Requirements from the Central Valley RWQCB.

Comment Letter A7: City of Sacramento Department of Utilities

Response to Comment A7-1:

The IS/MND has been revised to clarify that the Proposed Project would be subject to the City of Sacramento Department of Utilities (DOU) Water Development Fee, consistent with the City's standard requirements for new development. This revision has been incorporated into Section 2.2.5 of the IS/MND. Revisions to the IS/MND are documented in the Errata below.

Response to Comment A7-2:

The IS/MND has been revised to clarify that the Proposed Project would be subject to the City of Sacramento DOU Water Development Fee, consistent with the City's standard requirements for new development. This revision has been incorporated into Section 3.16.1 of the IS/MND. Revisions to the IS/MND are documented in the Errata below.

Errata

This errata sheet presents revisions to the September 2025 IS/MND in ~~striketrough~~ and underline format. These revisions do not affect the adequacy of the environmental analysis contained in the IS/MND. Because the changes would not result in any new significant impacts, increase the severity of previously disclosed impacts, or provide new information that would alter the conclusions of the analysis, recirculation of the IS/MND is not required pursuant to CEQA Guidelines Section 15073.5. The following changes are provided for clarification purposes only and do not alter the analysis or conclusions of the IS/MND.

Section 2.2.5 Utilities

1. Page 9 of the IS/MND has been revised to include the following information:

...The Proposed Project includes an 8-inch fire water main that loops around the proposed roundabout road and connects to five fire hydrants located around the proposed building. Additionally, a 2-inch domestic water main will connect to the building along its southern boundary. Both proposed service mains would be constructed within the footprint of the proposed road and connect to existing city utilities within Ramona Avenue. The new service connections to the City of Sacramento DOU system would be subject to the Water Development Fee from DOU.

2. All references to the "Sacramento Regional Wastewater Treatment Plant" and "SRWWTP" have been updated to "EchoWater Resource Recovery Facility," as reflected on pages 9, 60, 90, and 92 of the IS/MND. In addition, all references to the "Sacramento Regional County Sanitation District (SASD)" and "Regional San" have been updated to "Sacramento Area Sewer District (SacSewer)," as reflected on pages 9, 45, 50, and 90 of the IS/MND.

...The Proposed Project is located within the Sacramento Area Sewer District (SacSewer) ~~(SASD)~~, which provides wastewater collection to the project area through a separated system. Wastewater from ~~SASD's~~ SacSewer's system and the City's separated system drains into interceptors owned and operated by SacSewer ~~the Sacramento Regional County Sanitation District (Regional San)~~, which conveys flows to the EchoWater Resource Recovery Facility ~~Sacramento Regional Wastewater Treatment Plant (Sacramento Regional WWTP)~~, also owned by SacSewer ~~Regional San~~. The Proposed Project includes an 8-inch sewer main that will be

constructed within the footprint of the proposed road and connect to the building along its southern boundary.

Section 3.3.4 Impact Assessment (Air Quality)

- Table 3.3-5 of the IS/MND on page 22 has been revised to reflect the updated HRA for construction health risks. However, the conclusions of the construction health risk analysis remain unchanged.

Table 3.3-1: Construction Health Risk Impacts at the Nearby Sensitive Receptors

Receptor	Maximum Cancer Risk - Mitigated (per million)	Non-Cancer (Health Index) Chronic Health Risk
Receptor 1: Little League Park	<u>1.15</u> ~~1.06~~	<u>0.01</u> ~~0.03~~
Receptor 2: Residence	<u>9.34</u> ~~8.58~~	<u>0.05</u> ~~0.21~~
Receptor 3: Residence	<u>8.83</u> ~~8.10~~	<u>0.04</u> ~~0.17~~
Receptor 4: Residence	<u>8.24</u> ~~7.53~~	<u>0.03</u> ~~0.13~~
Receptor 5: Lark Apartments	<u>0.55</u> ~~0.51~~	<u>0.003</u> ~~0.01~~
Receptor 6: Youth Symphony	<u>0.77</u> ~~0.71~~	<u>0.004</u> ~~0.02~~
SMAQMD Significance Threshold	10.0	1.0
Threshold Exceeded?	No	No

Source: Revised Appendix B

- Minor text clarifications are necessary to the operational analysis of health risks to reflect the updated HRA. The following updates are made to page 23:

Operation: Because the specific operations of the warehouse tenant that would lease the warehouse component of the project are currently unknown, conservative assumptions consistent with typical warehouse uses were utilized, as appropriate, to estimate TACs associated with project operations. Typical warehouse uses do not include manufacturing or stationary emission sources. Although not anticipated, should such uses be proposed as a later change to the project, they would be subject to stationary source permitting requirements by the SMAQMD, which would in turn trigger the requirements of CEQA and require the preparation of an HRA. The primary sources of TACs associated with operation of the Proposed Project include DPM emissions from truck traffic and truck idling. DPM emissions were estimated using both PM_{2.5} and PM₁₀ emission factors from ~~EMFAC2017~~ EMFAC 2021 for Sacramento County which were used collectively to assess potential impacts to sensitive receptors. **Table 3.3-6** presents the results of dispersion modeling for operational emissions at nearby sensitive receptors (see **Revised Appendix B**). The analysis shows that TAC emissions at these receptors would not exceed applicable significance thresholds. Although the impact does not exceed significance thresholds and therefore is considered less than significant, to ensure TAC emissions are minimized and idling times are restricted to 5 minutes or less in compliance with State regulations, including those found in CCR Title 13, Division 3, Chapter 9, Article 4.8, §2449(d)(2) and Chapter 10, Article 1, §2485, a Condition of Approval will be imposed on the Project, if it is approved, to require the

installation of a permanent sign to inform operators of diesel-fueled commercial motor vehicles of the State's idling restrictions.

Furthermore, given the Proposed Project's proximity to nearby sensitive receptors, perimeter landscaping is proposed to improve air quality and reduce exposure to particulate air pollution (**Appendix A**). These features are generally consistent with the SMAQMD's *Landscaping Guidance for Improving Air Quality Near Roadways*, which outlines best practices for using vegetation to mitigate health impacts from motor vehicle emissions. In accordance with this guidance, should the Proposed Project be approved it would be subject to a Condition of Approval that tree species planted along the site perimeter would be selected for their effectiveness in filtering air pollutants and reducing airborne particulate matter using the SMAQMD's *Landscaping Guidance* to the maximum extent feasible, further reducing this already less-than-significant impact (SMAQMD, 2020c).

Table 3.3-2: Operational Health Risk Impacts at the Nearby Sensitive Receptors

Receptor	Maximum Cancer Risk (per million)	Non-Cancer (Health Index) Chronic Health Risk
Receptor 1: Little League Park	<u>0.007</u> ~~0.006~~	<u>0.0000015</u> ~~0.00000609~~
Receptor 2: Residence	<u>0.104</u> ~~0.088~~	<u>0.0000211</u> ~~0.0000829~~
Receptor 3: Residence	<u>0.146</u> ~~0.126~~	<u>0.0000295</u> ~~0.000128~~
Receptor 4: Residence	<u>0.202</u> ~~0.177~~	<u>0.000041</u> ~~0.000179~~
Receptor 5: Lark Apartments	<u>0.005</u> ~~0.004~~	<u>0.000001</u> ~~0.00000389~~
Receptor 6: Youth Symphony	<u>0.008</u> ~~0.006~~	<u>0.00000153</u> ~~0.00000645~~
SMAQMD Significance Threshold	10.0	1.0
Threshold Exceeded?	No	No

Source: **Revised Appendix B**

Section 3.16.3 Impact Assessment (Utilities and Service Systems)

The following changes have been made to add additional context or clarification to the IS/MND and they do not alter the analysis or conclusions of the IS/MND:

- Page 89 of the IS/MND has been revised to include the following information:

....The Proposed Project includes an 8-inch fire water main that loops around the proposed roundabout road and connects to five fire hydrants located around the proposed building. Additionally, a 2-inch domestic water main will connect to the building along its southern boundary. Both proposed service mains would be constructed within the footprint of the proposed road and connect to existing city utilities within Ramona Avenue. The new service connections to the City of Sacramento DOU system would be subject to the Water Development Fee from DOU.

- Page 91 of the IS/MND has been revised to include the following information:

While new infrastructure would be needed within the Project Site to service the Proposed Project, these improvements would be generally contained within the footprint of the proposed roadway and do not represent a major expansion or relocation of utility infrastructure with the potential for significant environmental impacts. The utility mainlines within Ramona Avenue were determined to have sufficient capacity to accommodate the Proposed Project. Furthermore, the Proposed Project will be required to coordinate with SacSewer to identify the appropriate connection point and to ensure that any new or modified sewer improvements are designed and constructed in accordance with applicable SacSewer standards and specifications prior to connection. Therefore, impacts would be less than significant.

7. Page 92 of the IS/MND has been revised to include the following information:

Less than Significant. EchoWater Resource Recovery Facility SRWWTP provides wastewater treatment services to the City, including the Project Site, and has a total capacity of 400 million gpd. According to the 2023 Master EIR, the EchoWater Resource Recovery Facility SRWWTP currently receives an average of 165 mgd during dry weather conditions and 220 mgd during wet weather conditions. In 2025, the EchoWater Resources Recovery Facility treated an average of 116 million gallons of wastewater per day (SacSewer, 2025).

Section 6 | References

8. Page 101 of the IS/MND has been revised to include the following reference related to the above revisions:

SacSewer, 2025. SacSewer, By the Numbers. Available online at: https://sacsewer-bucket.s3.us-west-1.amazonaws.com/wp-content/uploads/Final_2025_SacSewer-By-The-Numbers-2024-stats.pdf. Accessed October 2025.

Attachment A
Bracketed Comment Letters

From: [Dhatt, Satwinder K@DOT](#) on behalf of [D3 Local Development@DOT](#)
To: [Scott Johnson](#)
Cc: [Armando Lopez](#)
Subject: RE: Notice of Availability/Intent to Adopt the Ramona Industrial Project (DR24-195) Mitigated Negative Declaration
Date: Thursday, September 11, 2025 8:54:40 AM
Attachments: [image002.png](#)

Hi Scott,

Thank you for including the California Department of Transportation (Caltrans) in the review process for Ramona Industrial Project (DR24-195) Project. We wanted to reach out and let you know that we have no comments at this time.

Please provide our office with copies of any further actions regarding this proposal. We would appreciate the opportunity to review and comment on any changes related to this development.

Should you have questions please contact me, Local Development Review and System Planning Coordinator, by phone (530) 821-8261 or via email at D3.local.development@dot.ca.gov.

Thank you!

Satwinder Dhatt
Local Development Review and Complete Streets
Division of Planning, Local Assistance, and Sustainability
California Department of Transportation, District 3
703 B Street, Marysville, CA 95901
(530) 821-8261

From: Scott Johnson <SRJohnson@cityofsacramento.org>
Sent: Thursday, September 4, 2025 11:16 AM
To: Scott Johnson <SRJohnson@cityofsacramento.org>
Cc: Armando Lopez <ALopezJr@cityofsacramento.org>
Subject: Notice of Availability/Intent to Adopt the Ramona Industrial Project (DR24-195) Mitigated Negative Declaration

EXTERNAL EMAIL. Links/attachments may not be safe.

Hello,

This email is to inform you that the City of Sacramento, Community Development Department, as Lead Agency, has issued a **Notice of Availability/Intent to Adopt the Ramona Industrial Project (DR25-195) Mitigated Negative Declaration**.

The Comment Period is from September 4, 2025, to October 6, 2025.

The documents are now available for public review and comment. The NOA/NOI is available, along with the Mitigated Negative Declaration and Appendices at the City's Community Development Department's Environmental Impact Reports webpage at:

<https://www.cityofsacramento.gov/community-development/planning/environmental/impact-reports>

Comments are invited from all interested parties. Written comments on the Mitigated Negative Declaration should be submitted to the following address **NO LATER THAN 5:00 p.m. on Monday, October 6, 2025**. All comments should be submitted via email or mailed to:

Scott Johnson, Principal Planner
City of Sacramento
Community Development Department
300 Richards Boulevard, 3rd Floor
Sacramento, CA 95811
srjohnson@cityofsacramento.org

Thank you.



Scott Johnson
Principal Planner

Planning - Environmental

300 Richards Blvd., 3rd Floor

Sacramento, CA 95811

Phone: 916-808-5842

Email: srjohnson@cityofsacramento.org

[CDD Website](#)



Yana Garcia
Secretary for
Environmental Protection



Department of Toxic Substances Control

Katherine M. Butler, MPH, Director
8800 Cal Center Drive
Sacramento, California 95826-3200
dtsc.ca.gov



Gavin Newsom
Governor

A2

SENT VIA ELECTRONIC MAIL

September 12, 2025

Charles Tschudin
Senior Planner
City of Sacramento
300 Richards Boulevard, Third Floor
Sacramento, CA 95811
Ctschudin@cityofsacramento.org

RE: MITIGATED NEGATIVE DECLARATION FOR RAMONA OPPORTUNITY
INDUSTRIAL DATED SEPTEMBER 4, 2025, STATE CLEARINGHOUSE NUMBER
[2025090177](#)

Dear Charles Tschudin,

The Department of Toxic Substances Control (DTSC) reviewed the Mitigated Negative Declaration (MND) for Ramona Opportunity Industrial (Project). The proposed Project consists of a request for a Site Plan and Design Review for the development of one 67,612 square foot (SF) facility that includes both warehouse and office space. The warehouse would be a single-story structure totaling 31,905 SF, including a 6,476 SF mezzanine, while the two-story office component totals 35,707 SF, with 16,677 SF on the first floor and 19,030 SF on the second floor. A 2,730 SF outdoor patio is proposed in the southwest corner of the Project Site, accessible from both the warehouse and office building. The Proposed Project also includes 134 parking spaces, internal circulation drives, and proposed planting of shade trees throughout the parking lot and the frontage of Ramona Avenue. DTSC recommends and requests consideration of the following comments:

1. A Phase II Subsurface Investigation Report was conducted by Partners and stated: "Benzene was detected in each of the soil gas samples (B1-SG through B6-SG) and TCE was detected in one of the six soil gas samples (B2-SG) at concentrations exceeding the applicable commercial/industrial regulatory screening criteria. The benzene impacts to soil gas appear to be consistently distributed throughout the subject property and the TCE impacts appear to be limited in extent. The source of the identified soil gas impacts is unclear at this time but may be attributed to the historical off-site landfill operations. The regulatory exceedances in soil gas indicate a potential vapor intrusion concern for the future occupants of the subject property if the site gets redeveloped. Based on the above, Partner recommends additional investigation to further evaluate the source and extent of the identified soil gas impact".

Based on these findings, DTSC recommends the City of Sacramento address contamination found to be present within the Project area through oversight from a [self-certified local agency](#), DTSC or Regional Water Quality Control Board. If entering into one of DTSC's voluntary agreements, please note that DTSC uses a single standard Request for Lead Agency Oversight Application for all agreement types. Please apply for DTSC oversight using this link: [Request for Agency Oversight Application](#). Submittal of the online application includes an agreement to pay costs incurred during agreement preparation. If you have any questions about the application portal, please contact the relevant [Regional Brownfield Coordinator](#) for your Project.
2. All imported soil/fill material should be tested to assess any COCs meet screening levels as outlined in [DTSC's Preliminary Endangerment Assessment Guidance Manual](#). Additionally, DTSC advises referencing the [DTSC Information Advisory Clean Imported Fill Material Fact Sheet](#) if importing fill is necessary. To minimize the possibility of introducing contaminated soil/fill material there should be documentation of the origins of the soil/fill material and, if applicable, sampling be conducted to ensure that the imported soil/fill material are suitable for the

A2-1

A2-2

intended land use. The soil sampling should include analysis based on the source of the soil/fill and knowledge of prior land use.

A2-2
Cont.

DTSC would like to thank you for the opportunity to comment on the MND for the Ramona Opportunity Industrial. Thank you for your assistance in protecting California's people and environment from the harmful effects of toxic substances. If you have any questions regarding these comments, please contact us via our [CEQA Review email](#).

Sincerely,

Tamara Purvis

Tamara Purvis
Associate Environmental Planner
HWMP - Permitting Division – CEQA Unit
Department of Toxic Substances Control
Tamara.Purvis@dtsc.ca.gov

Charles Tschudin
September 12, 2025
Page 4

cc: (via email)

Governor's Office of Land Use and Climate Innovation
State Clearinghouse
state.clearinghouse@lci.ca.gov

Annalee Sanborn
Project Manager
Acorn Environmental / Consulting Firm
asanborn@acorn-env.com

David Dailey
Project Director
Vegas Builds, Inc. / Project Applicant
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Dave Kereazis
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Scott Wiley
Associate Governmental Program Analyst
HWMP - Permitting Division – CEQA Unit
Department of Toxic Substances Control
Scott.Wiley@dtsc.ca.gov



October 2, 2025

Charles Tschudin, Senior Planner
 City of Sacramento Community Development Department
 300 Richards Boulevard, 3rd Floor, Sacramento, CA 95811

Subject: Ramona Opportunity Industrial Project (SCH2025090177)

Dear Charles Tschudin:

Thank you for providing the Sacramento Metropolitan Air Quality Management District (Sac Metro Air District) with the opportunity to review the [Mitigated Negative Declaration \(MND\) for the Ramona Opportunity Industrial Project](#) under the California Environmental Quality Act (CEQA). This project consists of Site Plan and Design Review for one 67,612 square foot facility that includes both warehouse and office space, and associated parking, located near the intersection of Ramona Drive and Cucamonga Avenue. The project is located adjacent to residential uses.

Sac Metro Air District offers the project comments below, on air quality and climate considerations for project implementation and CEQA review consistent with methods recommended in our [Guide to Air Quality Assessment in Sacramento County](#) (CEQA Guide), available on our website. We recommend providing the following clarifications and supplemental information in the MND and associated Health Risk Assessment (HRA) of public exposure to project-generated emissions:

- MND quantification tables cite [EMFAC](#) 2017 as a source, rather than the most recent version. Please include text in the MND and HRA clarifying why EMFAC 2017 is used, rather than the most recent version.
- The HRA indicates that project operations will include 31 maximum daily truck trips, presumably heavy- or medium-duty truck trips, which appears to be below some estimates in the Institute of Transportation Engineers (ITE) guidance for an industrial use of this size. Please include text in the MND and HRA clarifying the source of the 31 maximum daily truck trip estimate, with an assessment of how that source compares to ITE guidance estimates.
- MND [CalEEMod](#) outputs show user changes to default data for dust from materials movement. Please include text in the MND and HRA clarifying why this default was changed.
- HRA Tables 4 through 6 and Table 9, quantifying construction-related emissions, only show PM10 emissions. Please also disclose PM2.5 emissions and incorporate those emissions into the assessment of project health risk for use in determining whether project impacts to sensitive receptors are significant under CEQA. Please ensure that numbers in the HRA emission quantification tables clearly correspond to appropriate numbers in the MND CalEEMod outputs or EMFAC worksheets as applicable.

A3-1

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- Emission Factors in HRA Table 9 are much lower than those in Table 4, although both show CalEEMod defaults as the source of their information. Please include HRA text clarifying why the default sources differ.

A3-5

- HRA Table 3 shows ambient air quality emissions in the project area and Figure 4 identifies air quality monitoring sites for these emissions; however, these sites do not correspond to Sac Metro Air District Regulatory Air Monitoring Stations identified on our website here: <https://www.airquality.org/air-quality-health/air-monitoring/regulatory-air-monitoring>. Please use data from Sac Metro Air District’s monitoring stations to determine ambient air quality emissions. That data is available by clicking on points for each monitoring station mapped at the website above.

A3-6

- HRA Table 10 shows Cancer Risk associated with project construction emissions, and Tables 13 and 14 show Cancer Risk and “Chronic Health Risk” associated with project operational emissions. The HRA references the [Sac Metro Air District thresholds of significance](#) for public exposure to toxic air contaminants from stationary sources, rather than a range of sources such as mobile construction equipment. We do not have a threshold of significance for public exposure to mobile sources of toxic air contaminants. *While we accept your analysis method subject to the provision of clarifications and added information herein, and the use of stationary source threshold is not inappropriate here, it is important to note that the threshold is intended for use with stationary sources only.* Please include clarification in the final MND that the threshold is intended for use in assessing health risk from stationary sources.

A3-7

We also note that “Chronic Health Risk” is listed rather than Hazard Index in Table 14 although Sac Metro Air District’s threshold for Hazard Index appears to be referenced in that table. Please clarify whether the different nomenclature is intended to communicate the difference in meaning between the two terms, or if the chronic health risk listed in Table 14 actually refers to Hazard Index. If it is intended to communicate a different meaning, please clarify that meaning.

Further, we note that in the HRA the Hazard Index or Chronic Health Risk associated with project construction emissions is not provided, only the cancer risk. The MND does provide the “Chronic Health Risk” associated with project construction emissions (Table 3.3-5). Please ensure that the MND risk tables are fully and clearly documented in the HRA.

Further, we maintain the following recommendations from our September 2024 correspondence on this project, to help reduce health risk from toxic air contaminant (TAC) emissions from project operations, particularly due to its potential to generate heavy duty truck trips, and from project construction, at nearby uses with sensitive receptors such as residences and a public park where children exercise. Sac Metro Air District recommends the following measures to help reduce public TAC exposure:

- Incorporate planting strips around the entire site perimeter to the full extent feasible (except where it abuts the public right-of-way), using tree species selected from Sac Metro Air District’s [Landscaping Guidance for Improving Air Quality Near Roadways](#) (Landscaping Guidance), available on our website. The Landscaping Guidance provides specific recommendations on using vegetation to reduce public health impacts from motor vehicle emissions, including the selection, placement, planting, and caring for tree and shrub species on project sites. We note the tree plantings proposed at the project perimeter. If more robust perimeter planting strips,

A3-8

as consistent with the Landscaping Guidance, are infeasible, we recommend ensuring that the trees proposed along the project perimeter be species selected from the Landscaping Guidance's shrub and tree information table, to the full extent feasible.

- Prominently post signage informing project users of California Code of Regulations (CCR) requirements to minimize idling time for diesel-powered equipment and vehicles, either by shutting them off when not in use or reducing the time of idling to 5 minutes. These requirements are in CCR Title 13, Division 3, [Chapter 9, Article 4.8, §2449\(d\)\(2\)](#) and [Chapter 10, Article 1, §2485](#).

A3-8
Cont.

Finally, as a reminder, consistent with [CalGreen 2022](#) requirements, facilities with planned off-street loading spaces must provide basic infrastructure for future installation of medium- and heavy-duty electric vehicle supply equipment (Title 24, Part 11, Item 5.106.5.5.1). The California Air Resources Board adopted the [Advanced Clean Trucks Regulation](#) in 2020, requiring manufacturers of medium- and heavy-duty trucks to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. Consistent with this direction, California Air Resources Board programs can provide infrastructure incentive funds, including the [Carl Moyer Program](#) and [the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project](#). You may contact Sac Metro Air District staff at 800-880-9025 for more information on local Carl Moyer Program funding.

A3-9

Construction

All projects are subject to Sac Metro Air District rules and regulations in effect at the time of construction. Please visit our website to [find a list of the most common rules that apply at the construction phase of projects](#).

A3-10

Conclusion

Thank you for your attention to our comments. If you have questions about them, please contact me at mwright@airquality.org or 279-207-1157.

Sincerely,



Molly Wright, AICP
Air Quality Planner / Analyst

c: Rich Muzzy, Program Supervisor, Sac Metro Air District



Office of the County Executive
David Villanueva
County Executive

Social Services Agency
Chevon Kothari
Deputy County Executive

**Environmental Management
Department**
Jennea Monasterio
Director

County of Sacramento

October 3, 2025

VIA ELECTRONIC MAIL

Scott Johnson, Principal Planner
City of Sacramento, Community Development Department
300 Richards Boulevard, 3rd Floor
Sacramento, CA 95811

Dear Scott Johnson,

**SUBJECT: LOCAL ENFORCEMENT AGENCY (LEA) RECOMMENDATIONS ON
MITIGATED NEGATIVE DECLARATION, RAMONA INDUSTRIAL
PROJECT (DR24-195), LOCATED AT 3316 RAMONA AVE,
SACRAMENTO, CA 95826**

Authority

The Sacramento County Environmental Management Department (EMD) acts as the Local Enforcement Agency (LEA) for the California Department of Resources, Recycling, and Recovery (CalRecycle) in Sacramento County. As such, EMD has authority and responsibility for regulatory oversight of solid waste handling and disposal sites in the city and county of Sacramento.

Background

EMD received the Notice of Availability/Intent to Adopt Mitigated Negative Declaration from the City of Sacramento Community Development Department and has reviewed environmental documents for a project located within the vicinity of solid waste facilities regulated by EMD as the LEA: the closed 14th Avenue Landfill and the Waste Management Recycle America dba K&M Recycling facility (currently closed).

The proposed project includes development of a 67,612 square foot facility that includes a single-story warehouse and a two-story office space with 134 parking spaces on an undeveloped 5.75-acre site within the Manufacturing, Research, and Development Zone with a Solid Waste Restricted Overlay located on Ramona Avenue in Sacramento, CA.

This project is approximately 250 feet northeast of the "West Pit" of the closed 14th Avenue Landfill. Potential concerns for the project are landfill gas migration into buildings which can cause health concerns and become flammable or explosive at sufficient concentrations.

**LEA
Response**

The LEA provides the following recommendations regarding the proximity of the project to the closed 14th Avenue Landfill:

1. The applicant/owner should be informed that the project is located 250 feet northeast of the "West Pit" of the closed 14th Avenue Landfill. Currently, the landfill maintains a landfill gas monitoring network installed along the respective property perimeter, pursuant to California Code of Regulations (CCR), Title 27, Section 20925, and monitors for offsite gas migration; however, landfill gas generated at the former landfill has the potential to migrate.
2. EMD agrees with the requirements of local planning/building documentation in the Sacramento Center for Innovation Specific Plan (amended 1/23/2018), 3.11 Goals and Policies, Policy LU 3.5.4, which states that all non-residential development within 1,000 feet of the 14th Avenue Landfill comply with the regulations contained in 27 CCR 21190(g) governing post-closure land use.
3. While the project is not on landfill property, because it is in the vicinity of the closed landfill, it is highly recommended that safety measures specified in 27 CCR Section 21190(g) be implemented in the project design and construction to prevent gas migration into buildings, and automatic methane gas monitoring sensors with alarms are installed in any enclosed structure (i.e., warehouse or office space) within 1,000 feet of the landfill footprint.

A4-1

A4-2

A4-3

Contact

Please contact me at millerkam@saccounty.gov or (916) 206-5162 if you have any questions regarding this letter.

Sincerely,



Kamron Miller, Environmental Specialist
Solid Waste/LEA Program

KM:rg

c: Casey Yearout, CalRecycle, via email
Armando Lopez Jr., City of Sacramento, via email

\\cosp-f-sfs01\emd-workgroups\$\Solid Waste\LEA_Solid Waste Facilities\K&M\Ramona Industrial Project\2025-10-03.LEA
Comment Letter-Ramona Industrial Project.docx

October 3, 2025

Scott Johnson
City of Sacramento
Community Development Department
Environmental Planning Services
300 Richards Blvd, 3rd Floor
Sacramento, CA 95811

**Subject: NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE
DECLARATION FOR RAMONA OPPORTUNITY INDUSTRIAL PROJECT**
APN: 079-0281-031
File No: DR24-195

Dear Mr. Johnson,

The Sacramento Area Sewer District (SacSewer) has reviewed the subject document.

The approximately 5.75-acre Project Site is located on Ramonda Drive at the terminus of Cucamonga Avenue in the City of Sacramento, California.

The proposed project consists of the development of a 67,612 square foot (SF) office and warehouse facility on a 5.75-acre site. The warehouse would be a single-story structure totaling 31,905 SF, including a 6,476 SF mezzanine. The two-story office component totals 35,707 SF, with 16,677 SF on the first floor and 19,030 SF on the second floor. A 2,730 SF outdoor patio is proposed in the southwest corner of the project site, accessible from both the warehouse and office building. The Proposed Project also includes 134 parking spaces.

Note: Effective January 1, 2024, the Sacramento Regional County Sanitation District and the Sacramento Area Sewer District merged into one district called the Sacramento Area Sewer District, or SacSewer for short.

SacSewer provides local sewer service to the proposed project site via its collection system and conveys sewage from the collection system to the EchoWater Resource Recovery Facility for treatment, resource recovery, and disposal.

SacSewer is not a land-use authority and plans and designs its sewer systems using information from land-use authorities. SacSewer bases the projects identified within its planning documents on growth projections provided by these land-use authorities.

A5-1

www.sacsewer.com

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Customers receiving service from SacSewer are responsible for rates and fees outlined within the latest SacSewer ordinance. Fees for connecting to the sewer system recover the capital investment of sewer and treatment facilities that serve new customers. SacSewer does not guarantee sewer service or system capacity to the property until the property obtains proper permits to connect to the system and pays all facility impact (capacity) fees. The SacSewer ordinances are on the SacSewer website at [Ordinances - Sacramento Area Sewer District \(sacsewer.com\)](http://sacsewer.com).

A5-1
Cont.

SacSewer has the following comments on the Initial Study/Mitigated Negative Declaration:

Pg. 9 – 2.2.5 Utilities: Wastewater

The Proposed Project is located within the Sacramento Area Sewer District (SASD), which provides wastewater collection to the project area through a separated system. Wastewater from SASD's system and the City's separated system drains into interceptors owned and operated by the Sacramento Regional County Sanitation District (Regional San), which conveys flows to the Sacramento Regional Wastewater Treatment Plant (Sacramento Regional WWTP), also owned by Regional San. The Proposed Project includes an 8-inch sewer main that will be constructed within the footprint of the proposed road and connect to the building along its southern boundary.

A5-2

- Please update all references of “Sacramento Regional Wastewater Treatment Plant” or “SRWTP” to its current name, “EchoWater Resource Recovery Facility.”
- Please also note that any reference of “Sacramento Regional County Sanitation District” should be updated to “Sacramento Area Sewer District” or “SacSewer.”
- Please ensure this is consistent throughout the report.

Pg. 44 – 3.7.3 Impact Assessment

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewer are not available for the disposal of waste water?

The Proposed Project would not require the construction or use of septic tanks or alternate wastewater disposal systems. The Proposed Project will be incorporated into the City's existing sewer system; therefore, there would be no impact.

A5-3

- The Proposed Project is within the Sacramento Area Sewer District (SacSewer) service area. Please change “City's existing sewer system” to “SacSewer's existing sewer system”.

Mr. Scott Johnson
DR24-195
October 3, 2025

Pg. 49 – 3.8.3 Impact Assessment: Table 3.8-3 Project Consistency with the City of Sacramento CAAP

This measure is primarily implemented by Regional San. The Proposed Project would support this measure by complying with City and CalGreen indoor water use efficiency requirements.

A5-4

- Please update all references of “Sacramento Regional Wastewater Treatment Plant” or “SRWTP” to its current name, “EchoWater Resource Recovery Facility.”

Pg. 91 – 3.16.3 Impact Assessment: Wastewater (a)

While new infrastructure would be needed within the Project Site to service the Proposed Project, these improvements would be generally contained within the footprint of the proposed roadway and do not represent a major expansion or relocation of utility infrastructure with the potential for significant environmental impacts.

A5-5

- SacSewer will need to be informed of additional details of the proposed improvements and consulted on any work which impact sewer facilities. SacSewer Standards and Specifications apply to any offsite or onsite public sewer construction or modification. These improvements must be shown on the plans.

Pg. 91 – 3.16.3 Impact Assessment: Wastewater

SRWWTP provides wastewater treatment services to the City, including the Project Site, and has a total capacity of 400 million gpd. The SRWWTP currently receives an average of 165 mgd during dry weather conditions and 220 mgd during wet weather conditions. According to the Master EIR, future development under the 2040 General Plan would not generate wastewater flows exceeding the WWTP’s capacity

A5-6

- Please verify and update the reported average flow values for dry weather and wet weather conditions (currently listed as 165 mgd and 220 mgd).

If you have any questions regarding these comments, please call me at (916) 875-2917.

Sincerely,

Manjot Dhugga

Manjot Dhugga
SacSewer Development Services



Central Valley Regional Water Quality Control Board

6 October 2025

Scott Johnson
City of Sacramento
Community Development Department
300 Richards Boulevard, 3rd Floor
Sacramento, CA 95811
srjohnson@cityofsacramento.org

COMMENTS TO REQUEST FOR REVIEW FOR THE MITIGATED NEGATIVE DECLARATION, RAMONA INDUSTRIAL PROJECT (DR24-195), SACRAMENTO COUNTY

Pursuant to the City of Sacramento Community Development Department's 4 September 2025 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Mitigated Negative Declaration* for the Ramona Industrial Project (DR24-195), located in Sacramento County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as

A6-1

required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues. For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website:

http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/

Antidegradation Considerations

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at:

https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_2018_05.pdf

In part it states:

Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.

This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit), Construction General Permit Order No. 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). For more information on the Construction General Permit, visit the

A6-1
Cont.

State Water Resources Control Board website at:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Clean Water Act Section 404 Permit

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is required by the USACE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements. If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250.

Clean Water Act Section 401 Permit – Water Quality Certification

If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications. For more information on the Water Quality Certification, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality/certification/

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Cont.

Waste Discharge Requirements – Discharges to Waters of the State

If USACE determines that only non-jurisdictional waters of the State (i.e., “non-federal” waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation. For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/

Projects involving excavation or fill activities impacting less than 0.2 acre or 400 linear feet of non-jurisdictional waters of the state and projects involving dredging activities impacting less than 50 cubic yards of non-jurisdictional waters of the state may be eligible for coverage under the State Water Resources Control Board Water Quality Order No. 2004-0004-DWQ (General Order 2004-0004). For more information on the General Order 2004-0004, visit the State Water Resources Control Board website at:

https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2004/wqo/wqo2004-0004.pdf

Dewatering Permit

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Threat General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Threat Waiver) R5-2018-0085. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Threat General Order and the application process, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

For more information regarding the Low Threat Waiver and the application process, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2018-0085.pdf

Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited Threat Discharges to Surface Water* (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order. For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at:

https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf

NPDES Permit

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit. For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at: <https://www.waterboards.ca.gov/centralvalley/help/permit/>

A6-1
Cont.

6 October 2025

If you have questions regarding these comments, please contact me at (916) 464-4684
or Peter.Minkel2@waterboards.ca.gov.

A handwritten signature in blue ink that reads "Peter G. Minkel". The signature is written in a cursive, flowing style.

Peter G. Minkel
Engineering Geologist

parking in the gravel area. An underground roof drainpipe on the northern wall of the warehouse would be connected to the detention basin.

2.2.5 Utilities

The following sections describe the proposed stormwater drainage infrastructure improvements that would be included in the Project. The Proposed Project has been designed to avoid all existing utilities. The proposed easements within the footprint of the roundabout loop are shown in **Appendix A**. Offsite improvements will be limited to connections to existing City utilities within the footprint of Ramona Avenue. Sacramento Municipal Utilities District (SMUD) would supply electricity to the Project Site, and no natural gas is proposed for the Project. Trash, recycling, and organic receptacles are proposed on site, per City standards.

Section should note that new domestic or irrigation water service connections are subject to the Water Development Fee.

A7-1

Water

Potable water for the project area is supplied by the City of Sacramento DOU via mainlines within nearby roadways including Ramona Avenue. The City uses surface water from the American and Sacramento Rivers, as well as groundwater north of the American River, to meet municipal demand. The Proposed Project includes an 8-inch fire water main that loops around the proposed roundabout road and connects to five fire hydrants located around the proposed building. Additionally, a 2-inch domestic water main will connect to the building along its southern boundary. Both proposed service mains would be constructed within the footprint of the proposed road and connect to existing city utilities within Ramona Avenue.

Wastewater

The Proposed Project is located within the Sacramento Area Sewer District (SASD), which provides wastewater collection to the project area through a separated system. Wastewater from SASD's system and the City's separated system drains into interceptors owned and operated by the Sacramento Regional County Sanitation District (Regional San), which conveys flows to the Sacramento Regional Wastewater Treatment Plant (Sacramento Regional WWTP), also owned by Regional San. The Proposed Project includes an 8-inch sewer main that will be constructed within the footprint of the proposed road and connect to the building along its southern boundary.

Stormwater

The Project Site is located within the City's separated drainage system, meaning stormwater drainage is collected by individual drainage sumps. The runoff is then conveyed to the Sacramento Regional WWTP for treatment before being discharged into the Sacramento River. The Project Site is located within Drainage Basin 43, which is subject to the new Drainage Pumped Impact Fee per City Council Resolution 2023-0368.

2.2.6 Landscaping and Fencing

The Proposed Project includes a comprehensive landscaping plan designed to screen the property along its perimeters and buffer adjacent incompatible uses, as well as provide parking lot shade in accordance with Municipal Code Section 17.612.040 (see Sheets L1.0 and L1.1 in **Appendix A**). A 10-foot landscape setback is proposed along the northern, western, and southern perimeters of the Project Site, while a 25-foot setback is proposed along the eastern frontage along Ramona Avenue. These setbacks provide visual

3.16 UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

3.16.1 Environmental Setting

The Project Site is located adjacent to existing commercial, industrial, and residential development; therefore, utility infrastructure is present in the area. Existing utilities and service systems near the Project Site, including water, gas, and telecommunications, are discussed in **Section 2.2.5** and below. Utility plans are provided in **Appendix A**.

Water

Section should note that new domestic or irrigation water service connections are subject to the Water Development Fee.

A7-2

Potable water for the project area is supplied by the City of Sacramento DOU via mainlines within nearby roadways including Ramona Avenue. The City uses surface water from the American and Sacramento Rivers, as well as groundwater north of the American River, to meet municipal demand. The Proposed Project includes an 8-inch fire water main that loops around the proposed roundabout road and connects to five fire hydrants located around the proposed building. Additionally, a 2-inch domestic water main will connect to the building along its southern boundary. Both proposed service mains would be constructed within the footprint of the proposed road and connect to existing city utilities within Ramona Avenue.

Appendix B

Revised Health Risk Assessment

HEALTH RISK ASSESSMENT



Ramona Opportunity Industrial Project

October 2025

Prepared by:



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EXECUTIVE SUMMARY

A Health Risk Assessment (HRA) must include a detailed statement setting forth mitigation measures, if applicable, to minimize a project's significant environmental effects as required by the City of Sacramento and the California Environmental Quality Act (CEQA) Guidelines. According to Appendix G of the CEQA Guidelines, prospective air quality implications of a project shall be considered to confirm if the project will result in significant impacts on the environment.

This HRA includes relevant information and analyses that address the Toxic Air Contaminants (TAC) implications of the proposed Ramona Opportunity Industrial Project (Project) located in Sacramento, California. The Project's anticipated operations are evaluated to determine whether the Project would:

- Air Quality
 - Expose sensitive receptors to substantial pollutant concentrations?

Air Quality Impacts

Expose sensitive receptors to substantial pollutant concentrations?

Project Construction

Construction-related activities would result in emissions of diesel particulate matter (DPM) from the exhaust of off-road, heavy-duty diesel equipment for site preparation (e.g., demolition, clearing, grading); paving; application of architectural coatings; on-road truck travel; and other miscellaneous activities. For construction activity, DPM is the primary toxic air contaminant of concern. Cancer risk was calculated using the most recent version of the OEHHA guidelines for health risk assessments. TAC emissions associated with the construction of the Project were used to assess impacts to adjacent sensitive receptors. Table 4a shows the estimated DPM emissions from on-site construction equipment considering various construction phases. Table 4b shows the estimated PM_{2.5} emissions from on-site construction equipment. Tables 5a, 5b, 6a and 6b show estimated construction emissions for PM₁₀ and PM_{2.5} from on-site mobile sources and on-site idling from mobile sources.

Tables 7 and 8 identify the impact of Project construction emissions, considering dispersion modeling, at adjacent sensitive receptors which represent the maximally exposed individuals. Results of the analysis show that TAC emissions at residences adjacent to the Project site (sensitive receptors 2, 3, and 4) would exceed the 10 in one million threshold from construction activities. Implementation of Mitigation Measure AQ-1 would be required to reduce substantial pollutant concentrations during Project construction.

- **Mitigation Measure AQ-1** - During Project construction, the Project contractor or Project representatives shall ensure that all off-road diesel-powered construction equipment used for grading and building construction meets the CARB Tier 4 emissions standards or equivalent.

Tables 9a and 9b show the estimated DPM and PM_{2.5} emissions from on-site construction equipment considering Mitigation Measure AQ-1. Table 10 shows that there is a ***less than significant impact*** from Project construction emissions with implementation of Mitigation Measure AQ-1.

Project Operations

The specific operations of the Project site are unknown at this time as the property developer intends to develop the site and lease the building to interested business(es). Conservative assumptions consistent with typical warehouse uses were utilized, as appropriate, to estimate TACs associated with Project operations. In the event a manufacturing type and/or stationary source emitting business seeks to lease the building, an updated project-specific HRA would be required.

Truck trips associated with the Project were derived from the Fontana Truck Trip Generation Study (August 2003) which resulted in an estimated 31 daily truck trips. The Institute of Transportation Engineers (ITE) Trip Generation Handbook (12th Edition) Warehouse (Land Use 150) and General Light Industrial (Land Use 110) land uses yield a daily truck trip volume of 29 and 17, respectively, considering a square footage of 67,612. Truck trips derived from the Fontana Truck Trip Generation Study yield a greater daily truck trip volume for the proposed Project and was ultimately used in this analysis.

The principal sources or processes from the Project that have the potential to emit various TAC's include diesel emissions from Truck Traffic and Truck Idling. The characteristics of the Project, typical warehouse uses, are not consistent with the land use categories presented in Table 2. However, Vehicle DPM emissions were estimated using emission factors for particulate matter less than 10µm in diameter (PM₁₀) generated with the 2021 version of EMFAC developed by the ARB. It should be noted that EMFAC 2017 was used where EMFAC 2021 data was unavailable (i.e. T7 Single Construction Vehicle Class). EMFAC is a mathematical model that was developed to calculate emission rates from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by CARB to project changes in future emissions from on-road mobile sources. EMFAC incorporates regional motor vehicle data, information and estimates regarding the distribution of vehicle miles traveled (VMT) by speed, and number of starts per day.

For this Project, annual average PM₁₀ and PM_{2.5} emission factors were generated by running EMFAC 2021 for vehicles in Sacramento County. The EMFAC model generates emission factors in terms of grams of pollutant emitted per vehicle activity and can calculate a matrix of emission factors at specific values of temperature, relative humidity, and vehicle speed. The model was run for speeds traveled in the vicinity of the Project. It was assumed that trucks traveled at 10 miles per hour while performing onsite driving and maneuvering. Emissions estimates for diesel operated vehicles are shown in Tables 11 and 12.

Tables 13 and 14 identify the impact of Project operational emissions, considering dispersion modeling, at adjacent sensitive receptors which represent the maximally exposed individuals. Results of the analysis show that TAC emissions at sensitive receptors adjacent to the Project site would not exceed applicable significant thresholds considering Project operations. TAC emissions generated during Project operations would not expose sensitive receptors to substantial pollutant concentrations. Therefore, mitigation is not warranted since there is a ***less than significant impact*** from Project operational emissions.

1.0 INTRODUCTION

A Health Risk Assessment (HRA) must include a detailed statement setting forth mitigation measures, if applicable, to minimize a project's significant environmental effects as required by the City of Sacramento and the California Environmental Quality Act (CEQA) Guidelines. According to Appendix G of the CEQA Guidelines, prospective air quality implications of a project shall be considered to confirm if the project will result in significant impacts on the environment.

This HRA includes relevant information and analyses that address the Toxic Air Contaminants (TAC) implications of the proposed Ramona Opportunity Industrial Project (Project) located in Sacramento, California. The Project's anticipated operations are evaluated to determine whether the Project would:

- Air Quality
 - Expose sensitive receptors to substantial pollutant concentrations?

Project impacts associated with construction (short-term) operations were examined as it relates to development of the Project. The Project has the potential to result in short-term air quality impacts due to construction activity. Air quality impacts associated with construction represent a short-term impact on ambient air quality levels and include activities such as site preparation, grading, and other construction-related activities. Long-Term impacts relate to the operation of the Project and include air quality emissions generated from site operations and increased traffic (diesel) in the study area. TACs associated with the operation of the Project were also evaluated to determine if the Project will result in significant impacts on the environment.

1.1 Project Description

This HRA evaluates TAC impacts associated with the Ramona Opportunity Industrial Project located in Sacramento, CA. Located approximately one mile southeast of California State University, Sacramento, the Project site is located adjacent to Ramona Avenue at the terminus of Cucamonga Avenue. The Project seeks to develop a combo warehouse/two-story office building on the property consistent with the underlying manufacturing zoning. The proposed warehouse component includes a gross square footage of 31,905 sq. ft. and the office component includes a gross square footage of 35,707 sq. ft. The Project site, designated as Employment Center Mid Rise in the City of Sacramento General Plan, encompasses approximately 5.75 acres with a portion of the site to be developed in the future. Figures 1 and 2 provide the regional and local context of the Project. Figure 3 provides the Project Site Plan.

The specific operations of the Project site are unknown at this time as the property developer intends to develop the site and lease the building to interested business(es). Conservative assumptions consistent with typical warehouse uses were utilized, as appropriate, to estimate TACs associated with the Project. In the event a manufacturing type and/or stationary source emitting business seeks to lease the building, an updated project-specific HRA would be required.

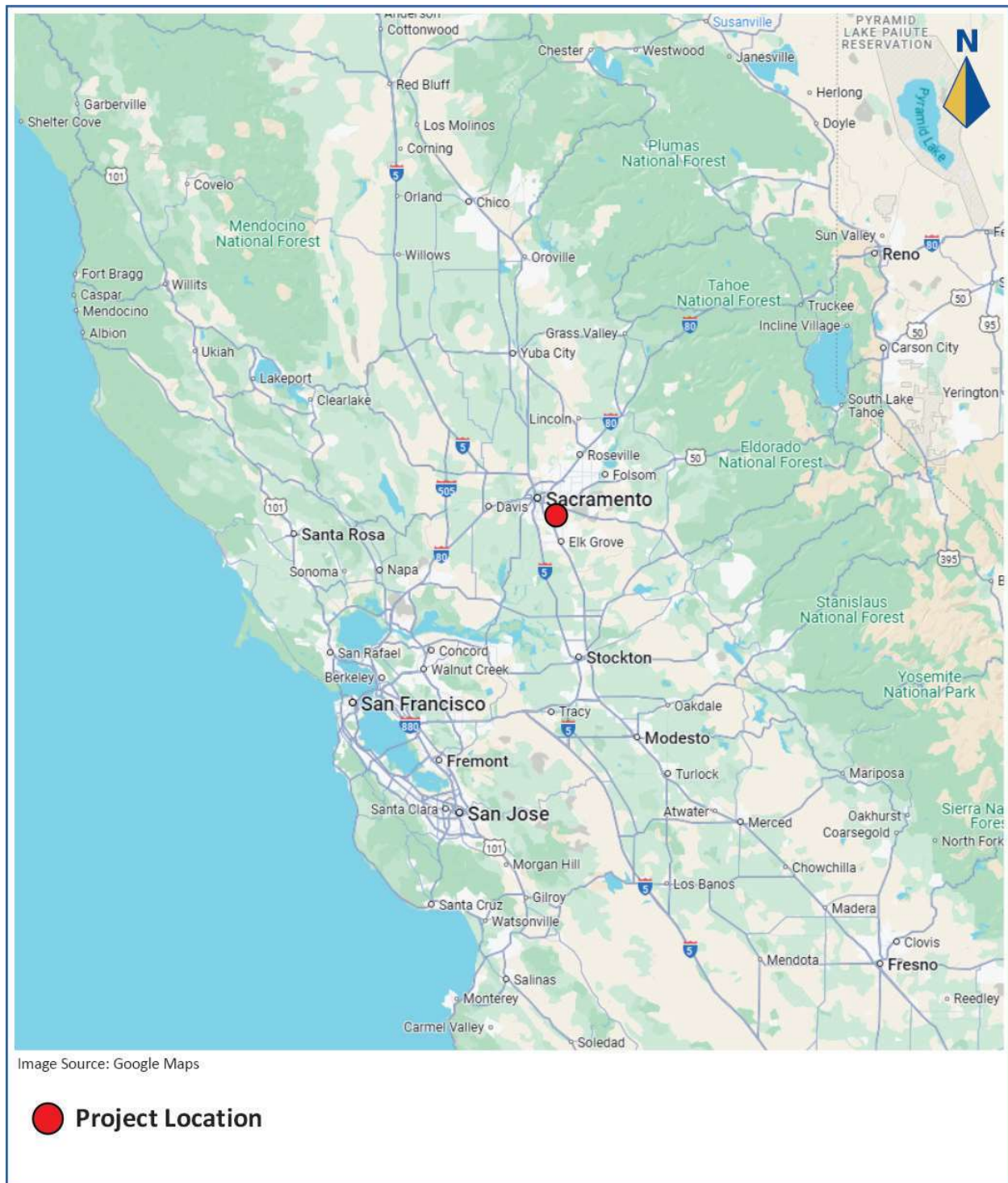


FIGURE 1
Regional Location

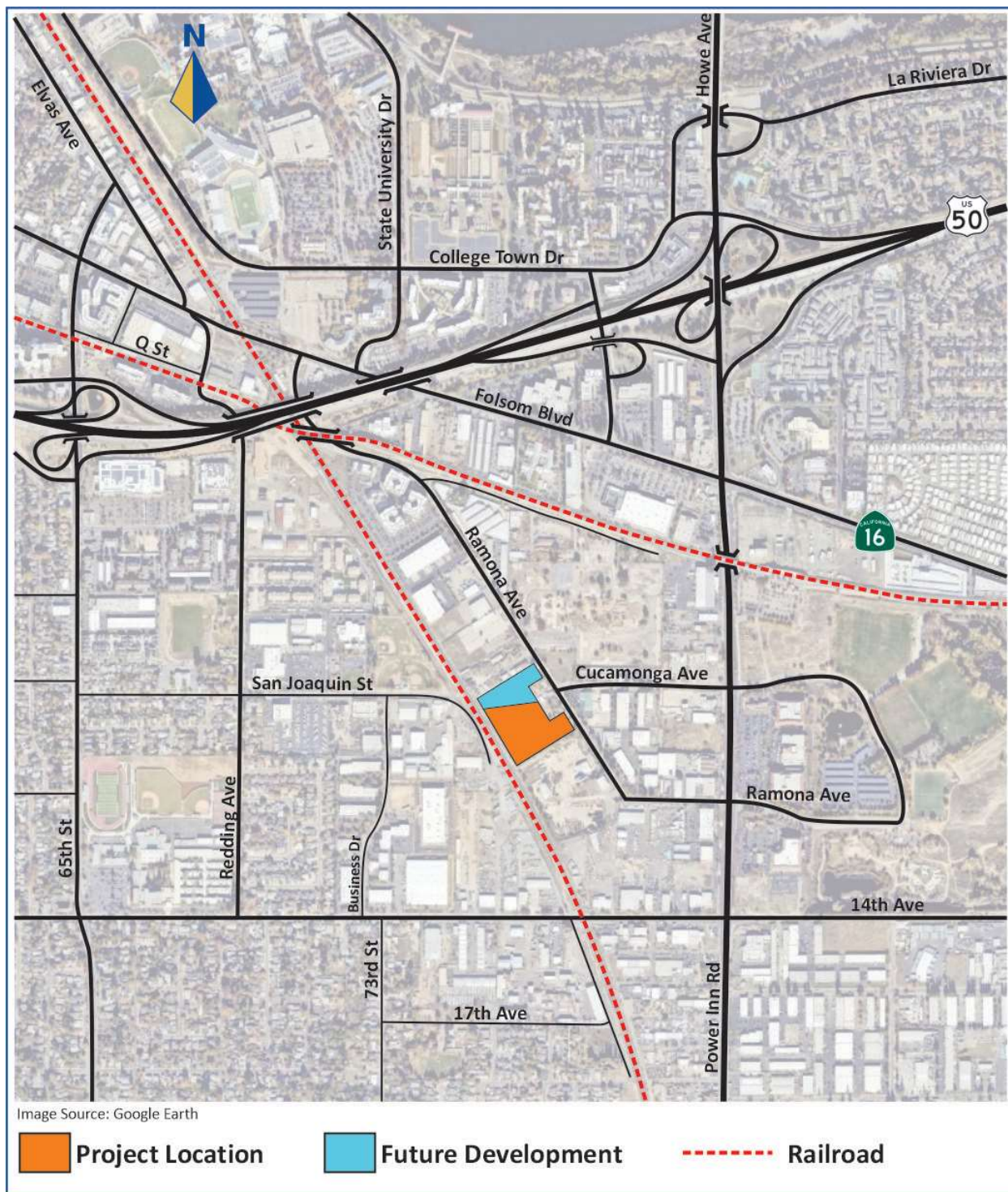


FIGURE 2
Project Location

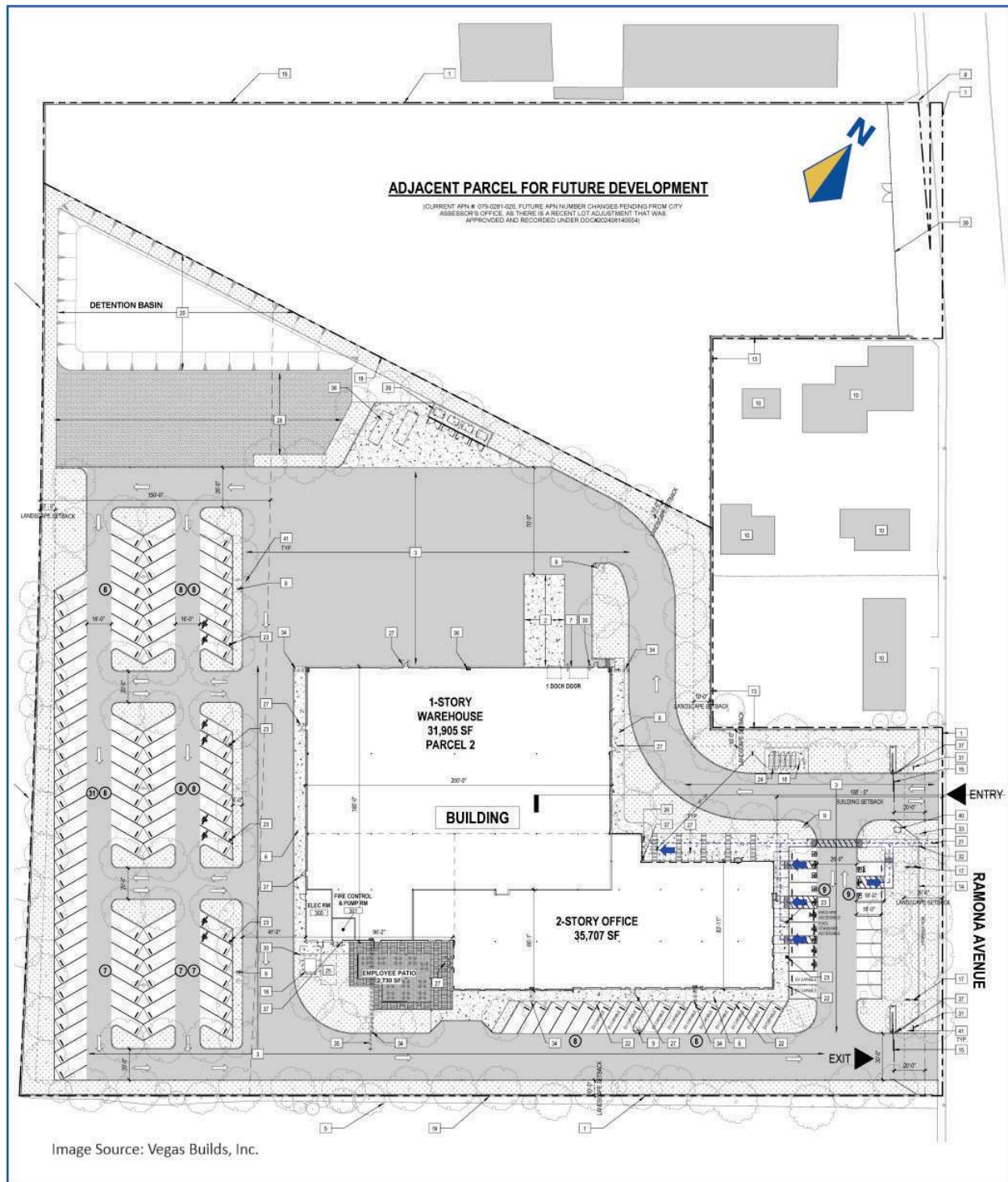


FIGURE 3
Project Site Plan

2.0 Air Quality

Air quality in a region is determined by the region's topography, meteorology, and existing air pollutant sources. These factors are discussed below, along with the current regulatory structure that applies to the Sacramento Valley Air Basin, which encompasses the Project site, pursuant to the regulatory authority of the Sacramento Metropolitan Air Quality Management District (SMAQMD).

2.1 Climate and Meteorology

Air quality is affected by the rate and location of pollutant emissions and by climatic conditions that influence the movement and dispersion of pollutants. Atmospheric conditions, such as wind speed, wind direction and air temperature gradients, along with local and regional topography, mediate the relationship between air pollutant emissions and air quality. As noted above, the Project is located within the Sacramento Valley Air Basin, which includes Butte, Colusa, Glenn, Placer, Sacramento, Shasta, Solano, Sutter, Tehama, Yola, and Yuba counties.

The Sacramento Valley Air Basin is approximately 215 miles long and 100 miles in width and is bordered by the Coast Range Mountains on the west and the Cascade Range Mountains on the east. The Coast Range and Cascade Range Mountains act as a barrier to the east and west and block airflow in the basin. Weak airflow caused by these topographical factors is vertically constrained by high atmospheric pressure above the Valley. The Sacramento Valley Air Basin is therefore vulnerable to pollutant buildup over time.

The Sacramento Valley Air Basin has a Mediterranean climate, which is characterized by hot, dry summers and mild, wet winters. The Sacramento Valley Air Basin offers ideal ozone generation conditions given an average of 265 sunny days per year. Precipitation and fog in the winter create optimal circumstances for particulate matter generation, even though they shield sunlight and reduce ozone levels.

2.2 Sources of Air Pollution

Air pollutant emissions in the Sacramento Valley Air Basin are generally caused by man-made sources, which encompass stationary and mobile sources. Stationary sources include point sources which are generally identified by an exhaust vent or stack (i.e., boilers). Area sources, such as residential and commercial water heaters, lawn mowers, and agricultural fields, are also categorized as stationary sources. Emissions from motor vehicles are characterized as mobile sources and include on-road (i.e., automobiles, trucks) and off-road (i.e., aircrafts, ships, trains) sources. Air pollutants can also be generated by natural means, such as the suspending of fine dust particles via high winds.

2.3 Toxic Air Contaminants

TACs refer to a broad category of air pollutants that could result in an increase in fatalities or serious illnesses, potential risk to human health, or any combination of these. TACs are both organic and inorganic chemical substances that can be released from a range of everyday sources, such as gasoline stations, automobiles, dry cleaners, industrial operations, painting operations, and research and educational

facilities. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For regulatory purposes, carcinogenic TACs are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is expressed as excess cancer cases per one million exposed individuals. Non-carcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. In April of 1993, the California Air Resources Board (CARB) identified 189 federal Hazardous Air Pollutants (HAPs) as TACs per Assembly Bill 2728 and approved the amended TACs list which are listed in Table 1. CARB has identified over 200 substances and groups of substances as TACs as documented in CARB's TAC Identification Reports.

Most of the estimated health risk from TACs, according to CARB's *California Almanac of Emissions and Air Quality* (2005), can be attributable to a small number of compounds. The most significant of which is Particulate Matter (PM) from diesel-fueled engines, which is known as diesel particulate matter (DPM). Diesel exhaust has hundreds of different gaseous and particulate components, many of which are harmful, and have been classified as a human carcinogen. Diesel particles are so small that they penetrate deep into the lungs. According to studies, diesel PM concentrations are significantly greater near busy intersections and roads. Heavy-duty vehicles and off-road construction equipment are main sources of diesel-related emissions. The CARB's *Air Quality and Land Use Handbook* (2005) provides recommendations for siting new sensitive land uses within proximity to facilities known to generate TACs, as depicted in Table 2.

Acute diesel exhaust exposure may irritate the eyes, nose, throat, and lungs, as well as certain neurological consequences like lightheadedness. A cough or nausea may also be caused by acute exposure, which can potentially make asthma worse. Experimental animal inhalation studies with chronic exposure have revealed a variety of dose-dependent lung cellular alterations, lung inflammation, and immunological consequences from diesel exhaust. There is substantial data, based on both human and laboratory studies, showing diesel exhaust is almost certainly carcinogenic. Studies on human epidemiology show a link between occupational exposure to diesel exhaust and a higher incidence of lung cancer.

TABLE 1
FEDERAL HAZARDOUS AIR POLLUTANTS (HAPS)
CLASSIFIED AS TOXIC AIR CONTAMINANTS (TACS)

Acetaldehyde	Dimethyl carbamoyl chloride	Parathion
Acetamide	Dimethyl formamide	Pentachloronitrobenzene (Quintobenzene)
Acetonitrile	1,1-Dimethyl hydrazine	Pentachlorophenol
Acetophenone	Dimethyl phthalate	Phenol
2-Acetylaminofluorene	Dimethyl sulfate	p-Phenylenediamine
Acrolein	4,6-Dinitro-o-cresol, and salts	Phosgene
Acrylamide	2,4-Dinitrophenol	Phosphine
Acrylic acid	2,4-Dinitrotoluene	Phosphorus
Acrylonitrile	1,4-Dioxane (1,4-Diethyleneoxide)	Phthalic anhydride
Allyl chloride	1,2-Diphenylhydrazine	Polychlorinated biphenyls (Aroclors)
4-Aminobiphenyl	Epichlorohydrin (1-Chloro-2,3-epoxypropane)	1,3-Propane sulfone
Aniline	1,2-Epoxybutane	beta-Propiolactone
o-Anisidine	Ethyl acrylate	Propionaldehyde
Asbestos	Ethyl benzene	Propoxur (Baygon)
Benzene (including benzene from gasoline)	Ethyl carbamate (Urethane)	Propylene dichloride (1,2-Dichloropropane)
Benzo(a)pyrene	Ethyl chloride (Chloroethane)	Propylene oxide
Benzotrithiol	Ethylene dibromide (Dibromoethane)	1,2-Propylenimine (2-Methylaziridine)
Benzyl chloride	Ethylene dichloride (1,2-Dichloroethane)	Quinoline
Biphenyl	Ethylene glycol	Quinone
Bis (2-ethylhexyl) phthalate (DEHP)	Ethylene imine (Aziridine)	Styrene
Bis (chloromethyl) ether	Ethylene oxide	Styrene oxide
Bromoform	Ethylene thiourea	2,3,7,8-Tetrachlorodibenzo-p-dioxin
1,3-Butadiene	Ethylidene dichloride (1,1-Dichloroethane)	1,1,2,2-Tetrachloroethane
Calcium cyanamide	Formaldehyde	Tetrachloroethylene (Perchloroethylene)
Caprolactam	Heptachlor	Titanium tetrachloride
Captan	Hexachlorobenzene	Toluene
Carbaryl	Hexachlorobutadiene	2,4-Toluene diamine
Carbon disulfide	Hexachlorocyclopentadiene	2,4-Toluene diisocyanate
Carbon tetrachloride	Hexachloroethane	o-Toluidine
Carbonyl sulfide	Hexamethylene-1,6-diisocyanate	Toxaphene (chlorinated camphene)
Catechol	Hexamethylphosphoramide	1,2,4-Trichlorobenzene
Chloramben	Hexane	1,1,2-Trichloroethane
Chlordane	Hydrazine	Trichloroethylene
Chlorine	Hydrochloric acid	2,4,5-Trichlorophenol
Chloroacetic acid	Hydrogen fluoride (Hydrofluoric acid)	2,4,6-Trichlorophenol
2-Chloroacetophenone	Hydroquinone	Triethylamine
Chlorobenzene	Isophorone	Trifluralin
Chlorobenzilate	Lindane (all isomers)	2,2,4-Trimethylpentane
Chloroform	Maleic anhydride	Vinyl acetate
Chloromethyl methyl ether	Methanol	Vinyl bromide
Chloroprene	Methoxychlor	Vinyl chloride
Cresols/Cresylic acid (isomers and mixture)	Methyl bromide (Bromomethane)	Vinylidene chloride (1,1-Dichloroethylene)
o-Cresol	Methyl chloride (Chloromethane)	Xylenes (isomers and mixture)
m-Cresol	Methyl chloroform (1,1,1-Trichloroethane)	o-Xylenes
p-Cresol	Methyl ethyl ketone (2-Butanone)	m-Xylenes
Cumene	Methyl hydrazine	p-Xylenes
2,4-D, salts and esters	Methyl iodide (Iodomethane)	Antimony Compounds
DDE	Methyl isobutyl ketone (Hexone)	Arsenic Compounds (inorganic including arsine)
Diazomethane	Methyl isocyanate	Beryllium Compounds
Dibenzofurans	Methyl methacrylate	Cadmium Compounds
1,2-Dibromo-3-chloropropane	Methyl tert butyl ether	Chromium Compounds
Dibutylphthalate	4,4-Methylene bis(2-chloroaniline)	Cobalt Compounds
1,4-Dichlorobenzene (p)	Methylene chloride (Dichloromethane)	Coke Oven Emissions
3,3-Dichlorobenzidine	Methylene diphenyl diisocyanate (MDI)	Cyanide Compounds [FN1]
Dichloroethyl ether (Bis (2-chloroethyl) ether)	4,4-Methylenedianiline	Glycol ethers [FN2]
1,3-Dichloropropene	Naphthalene	Lead Compounds
Dichlorvos	Nitrobenzene	Manganese Compounds
Diethanolamine	4-Nitrobiphenyl	Mercury Compounds
N,N-Diethyl aniline (N,N-Dimethylaniline)	4-Nitrophenol	Fine mineral fibers [FN3]
Diethyl sulfate	2-Nitropropane	Nickel Compounds
3,3-Dimethoxybenzidine	N-Nitroso-N-methylurea	Polycyclic Organic Matter [FN4]
Dimethyl aminoazobenzene	N-Nitrosodimethylamine	Radionuclides (including radon) [FN5]
3,3-Dimethyl benzidine	N-Nitrosomorpholine	Selenium Compounds

Source: CARB Identified Toxic Air Contaminants (<https://ww2.arb.ca.gov/resources/documents/carb-identified-toxic-air-contaminants>), 2025

TABLE 2
RECOMMENDATIONS ON SITING NEW SENSITIVE LAND USES SUCH AS RESIDENCES, SCHOOLS, DAYCARE CENTERS, PLAYGROUNDS, OR MEDICAL FACILITIES*

SOURCE CATEGORY	ADVISORY RECOMMENDATIONS
Freeways and High-Traffic Roads ¹	- Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.
Distribution Centers	- Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week). - Take into account the configuration of existing distribution centers and avoid locating residences and other new sensitive land uses near entry and exit points.
Rail Yards	- Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard. - Within one mile of a rail yard, consider possible siting limitations and mitigation approaches.
Ports	- Avoid siting of new sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or the ARB on the status of pending analyses of health risks.
Refineries	- Avoid siting new sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation.
Chrome Platers	- Avoid siting new sensitive land uses within 1,000 feet of a chrome plater.
Dry Cleaners Using Perchloroethylene	- Avoid siting new sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines, provide 500 feet. For operations with 3 or more machines, consult with the local air district. - Do not site new sensitive land uses in the same building with perchloroethylene dry cleaning operations.
Gasoline Dispensing Facilities	- Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50 foot separation is recommended for typical gas dispensing facilities.

1: The recommendation to avoid siting new sensitive land uses within 500 feet of a freeway was identified in CARB's Air Quality and Land Use Handbook published in 2005. CARB recently published a technical advisory to the Air Quality and Land Use Handbook indicating that new research has demonstrated promising strategies to reduce pollution exposure along transportation corridors.

***Notes:**

- These recommendations are advisory. Land use agencies have to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues.
- Recommendations are based primarily on data showing that the air pollution exposures addressed here (i.e., localized) can be reduced as much as 80% with the recommended separation.
- The relative risk for these categories varies greatly (see Table 1-2). To determine the actual risk near a particular facility, a site-specific analysis would be required. Risk from diesel PM will decrease over time as cleaner technology phases in.
- These recommendations are designed to fill a gap where information about existing facilities may not be readily available and are not designed to substitute for more specific information if it exists. The recommended distances take into account other factors in addition to available health risk data (see individual category descriptions).
- Site-specific project design improvements may help reduce air pollution exposures and should also be considered when siting new sensitive land uses.
- This table does not imply that mixed residential and commercial development in general is incompatible. Rather it focuses on known problems like dry cleaners using perchloroethylene that can be addressed with reasonable preventative actions.
- A summary of the basis for the distance recommendations can be found in the ARB Handbook: Air Quality and Land Use Handbook: A Community Health Perspective.

Source: CARB's Air Quality and Land Use Handbook

3.0 Regulatory Setting

3.1 Federal

The US Environmental Protection Agency (EPA) is the federal agency with significant influence on air quality policy and initiatives. The EPA regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain locomotives. As part of its enforcement responsibilities, the EPA requires each state with nonattainment areas to prepare and submit a State Implementation Plan (SIP) describing a strategy for the means to attain the federal standards for ozone and particulate matter. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution, using a combination of performance standards and market-based programs.

3.1.1 Clean Air Act

The federal Clean Air Act, as amended, establishes the national ambient air quality standards (NAAQS) for several pollutants. These standards are divided into primary standards and secondary standards. Primary standards are designed to protect public health, and secondary standards are intended to protect public welfare from effects such as visibility reduction, soiling, nuisance, and other forms of damage. The Clean Air Act requires that regional plans be prepared for nonattainment areas that illustrate how the federal air quality standards could be met.

Regulation of TACs is achieved through federal and state controls on individual sources. The 1990 Clean Air Act Amendments offered a comprehensive plan for achieving significant reduction in both mobile and stationary source emissions of certain designated hazardous air pollutants, with a goal of achieving the EPA's one in 1 million cancer risk from TACs.

3.1.2 1990 Amendments to the Federal Clean Air Act

The 1990 amendments to the federal Clean Air Act included a provision to address air toxics. Under Title III of the federal Clean Air Act, the U.S. EPA establishes and enforces National Emission Standards for Hazardous Air Pollutants, which are national uniform standards oriented toward controlling particular hazardous air pollutants. Section 112(b) of the federal Clean Air Act identifies 189 "Air Toxics" (hazardous air pollutants), directs U.S. EPA to identify sources of the 189 pollutants, and establishes a 10-year time period for the U.S. EPA to issue technology-based emissions standards for each source category. Title III of the federal Clean Air Act provides for a second phase under which the U.S. EPA is to assess residual risk after the implementation of the first phase of standards and impose new standards, when appropriate, to protect public health.

3.1.3 Energy Policy Act of 1992

The Energy Policy Act of 1992 (EPAct) was established in order to diminish the nation's reliance on foreign oil and enhance air quality. The EPAct contains a number of sections that are designed to create an inventory of alternative fuel vehicles (AFVs) in sizable, centrally-fueled fleets in urban areas. A percentage of light duty AFVs that can run on alternative fuels must be purchased by certain federal, state, local, and private fleets each year under the terms of EPAct. The EPAct also contains financial incentives. Businesses and individuals will be able to use federal tax deductions to offset the increased cost of AFVs.

3.2 State

The California Air Resources Board (CARB) sets the laws and regulations for air quality on the state level. In this capacity, CARB conducts research and sets the California Ambient Air Quality Standards (CAAQS), compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB also establishes emissions standards for motor vehicles sold in California, consumer products (i.e., hairspray, aerosol paints), and various types of commercial equipment.

3.2.1 California Clean Air Act

The California Clean Air Act (CCAA) was enacted in 1988 (California Health & Safety Code Section 39000 et seq.) and amended in 1992. The CAAQS are generally more stringent than the corresponding federal standards and incorporate additional standards for sulfates, hydrogen sulfide, vinyl chloride and visibility reducing particles. Air basins or areas that exceed the CAAQS are designated non-attainment until compliance is disclosed in an attainment plan. In California, CARB is responsible for meeting the State requirements of the federal CAA, administering the California CAA, and establishing the CAAQS. The California CAA, as amended in 1992, requires all air districts in the State to endeavor to achieve and maintain the CAAQS. CARB oversees the functions of local air pollution control districts and air quality management districts, which in turn administer air quality activities at the regional and county level.

3.2.2 Tanner Air Toxics Act

California regulates TACs through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). The Tanner Act establishes a procedure for CARB to designate substances as TACs, which includes research, public participation, and scientific peer review. CARB has identified over 21 TACs and adopted the EPA's list of HAPs (see Table 1) as TACs. Once a TAC is identified, CARB develops an Airborne Toxics Control Measure (ATCM) for sources emitting that specific TAC. If a substance has a safe threshold with no toxic effects, the control measure aims to reduce exposure below that level. If no safe threshold exists, the measure must use Best Available Control Technology (BACT) to minimize emissions.

AB 2588 mandates that facilities emitting toxic substances above a certain level must prepare a toxic-emission inventory, conduct a risk assessment if emissions are significant, inform the public about

significant risk levels, and develop and implement measures to reduce risk. CARB has implemented diesel exhaust control measures and stricter emission standards for various on-road mobile sources of emissions, including transit buses and off-road diesel equipment (e.g., tractors, generators).

These rules and standards include:

- Stricter emission standards for new urban bus engines starting with the 2002 models.
- Zero-emission bus requirements for transit agencies.
- Reporting requirements to show compliance with the urban transit bus fleet rule.

3.3 Regional

The Sacramento Metropolitan Air Quality Management District (SMAQMD) is the agency responsible for monitoring and regulating air pollutant emissions from stationary, area, and indirect sources within the City of Sacramento and throughout the Sacramento Valley Air Basin. The SMAQMD also has responsibility for monitoring air quality and setting and enforcing limits for source emissions. CARB is the agency with the legal responsibility for regulating mobile source emissions. The SMAQMD is precluded from such activities under State law.

The SMAQMD has developed plans to attain State and Federal standards for ozone and particulate matter. In addition, the SMAQMD monitors outdoor air pollution in Sacramento County via several air quality monitoring stations across the county. Monitoring stations supply crucial data for public health protection, compliance with air quality standards, and research support. SMAQMD conducted the Sacramento Traffic-Related Toxic Pollution Study to monitor air pollution and address community concerns about traffic-related pollutants. The project expanded air quality monitoring to include year-long, high-resolution measurements of air toxics, black carbon, and particulate matter at several community sites. The data quantified risk, assessed source contributions, and improved the community emissions inventory. Funding came from the EPA Air Toxics Monitoring Grant.

3.3.1 Rule 211 MACT at Major Sources of Hazardous Air Pollutants

The purpose of Rule 211 is to require the installation of maximum achievable control technology (MACT) at any constructed or reconstructed major source of HAPs after January 1, 1999. This rule applies to all owners or operators who construct or reconstruct a major HAP source unless exempt under Section 110.

3.3.2 Rule 403 Fugitive Dust

Rule 403 aims to regulate operations that periodically cause fugitive dust emissions into the atmosphere. This rule does not apply to emissions from agricultural operations, reclaimed land for agriculture, or public unpaved roads (excluding industrial or commercial facilities). A person must take reasonable steps to prevent fugitive dust emissions from escaping beyond the property line during construction, handling, storage, wrecking, excavation, grading, land clearing, or solid waste disposal activities. These precautions include, but are not limited to:

- Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the construction of roadways or the clearing of land;
- Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can give rise to airborne dusts;
- Other means approved by the Air Pollution Control Officer.

Regulation of TACs is achieved through federal and state controls on individual sources. The 1990 Clean Air Act Amendments offered a comprehensive plan for achieving significant reduction in both mobile and stationary source emissions of certain designated HAPs, with a goal of achieving the EPA's one in 1 million cancer risk from TACs.

3.4 Local

3.4.1 City of Sacramento 2040 General Plan

The Environmental Resources and Constraints Element of the City of Sacramento's 2040 General Plan provides air quality guidelines for Sacramento and establishes the following goals and policies that would be applicable to the Project:

- **Goal ERC-4** – Collaborative action to address air pollution in Sacramento.
 - **Policy ERC-4.3 – Project Design:** The City shall promote the incorporation of new technologies, materials, and design and construction techniques in private development projects that minimize air pollution, noise, excess heat, and other forms of pollution and its impacts.
 - **Policy ERC-4.4 – Sensitive Uses:** The City shall consult, as appropriate, with the SMAQMD in evaluating exposure of sensitive receptors to toxic air contaminants, and will impose conditions, as appropriate, on projects to protect public health and safety.
 - **Policy ERC-4.5 – Construction Emissions:** The City shall ensure that construction and grading activities minimize short-term impacts to air quality by employing appropriate measures and best practices. Refer to Basic Construction Emissions Control Practices (BMPs) recommended by the SMAQMD.

4.0 Existing Conditions

As noted above, the Project is located in the Sacramento Valley Air Basin which encompasses the Project study area and Sacramento County. The SMAQMD is the agency responsible for monitoring and regulating air pollutant emissions from stationary, area, and indirect sources within Sacramento County. There are seven (7) air quality monitoring stations throughout the SMAQMD territory which are part of a nationwide network called State/Local Air Monitoring Stations (SLAMS). These monitoring sites provide ambient air quality emissions throughout the valley for pollutants such as ozone, PM₁₀, PM_{2.5}, nitrogen oxides, sulfur oxides, and carbon monoxide. The nearest air quality monitoring site to the Project area is located to the west of the Project at 1309 T Street. Air quality monitoring data at 1309 T Street from 2022-2024 is provided in Table 3a.

Sonoma Technology, under contract with the SMAQMD, prepared the *Quantification of Local-Scale Benzene and Other Mobile Source Air Toxics in Sacramento's Communities* report (December 2024) which focused on air pollution monitoring in South Sacramento-Florin. As noted in the report, previous studies show that mobile sources are the main source of air toxics emissions in Sacramento. Table 3b provides the Phase 2 air monitoring data summary at six (6) sites within the South Sacramento-Florin area. The monitoring sites, depicted in Figure 4, are located approximately 2.8 to 6.4 miles south of the Project site.

The *Quantification of Local-Scale Benzene and Other Mobile Source Air Toxics in Sacramento's Communities* report indicated that the average arsenic, nickel, acetaldehyde, and benzene concentrations at the monitoring sites depicted in Figure 4, were below the California Office of Environmental Health Hazard Assessment (OEHHA) chronic inhalation noncancer reference exposure level (REL) (0.015, 0.09, 140, and 3 $\mu\text{g}/\text{m}^3$, respectively). The average lead concentration was below the National Ambient Air Quality Standards (NAAQS) of 0.15 $\mu\text{g}/\text{m}^3$. OEHHA does not have a cancer threshold for manganese but the results of the air quality monitoring show that average concentrations were below the noncancer chronic REL (0.09 $\mu\text{g}/\text{m}^3$).

TABLE 3a
1309 T STREET AMBIENT AIR QUALITY

Pollutant		2022	2023	2024
Ozone (O ₃)	Eight-Hour Average	0.079 ppm	0.071 ppm	0.077 ppm
	One-Hour Average	0.106 ppm	0.092 ppm	0.092 ppm
	Number of days of federal exceedances (>0.075 ppm)	1	0	1
	Number of days of federal exceedances (>0.070 ppm)	3	1	3
Particulate Matter (PM ₁₀)	Twenty-Four Hour Average	60.3 µg/m ³	62.6 µg/m ³	49.6 µg/m ³
	One Hour Maximum	243.1 µg/m ³	112.9 µg/m ³	95.3 µg/m ³
	State 24-hour standard level exceeded?	Yes	Yes	No
	National 24-hour standard level exceeded?	No	No	No
Particulate Matter (PM _{2.5})	Twenty-Four Hour Average	33.1 µg/m ³	35.6 µg/m ³	35.6 µg/m ³
	One Hour Maximum	70.6 µg/m ³	73.0 µg/m ³	68.5 µg/m ³
	Days above National Standard	0	1	1
Nitrogen Dioxide (NO ₂)	Twenty-Four Hour Average	0.028 ppm	0.023 ppm	0.022 ppm
	One Hour Maximum	0.050 ppm	0.042 ppm	0.047 ppm
	State 1-hour standard level exceeded?	No	No	No

Source: CARB Air Quality and Meteorological Information (AQMISS2), 2025

TABLE 3b
SOUTH SACRAMENTO-FLORIN AMBIENT AIR QUALITY

Monitoring Site	Description	Pollutant						
		Arsenic Mean, µg/m ³	Lead Mean, µg/m ³	Nickel Mean, µg/m ³	Manganese Mean, µg/m ³	Acetaldehyde Mean, µg/m ³	Benzene Mean, µg/m ³	Black Carbon Mean, µg/m ³
Sump 50	Residential	0.0005	0.0019	0.0005	0.0026	9.55	0.79	0.72
Station 56	Traffic/Industrial	0.0005	0.0027	0.0004	0.0019	11.85	0.85	0.54
Florin	Residential	0.0006	0.0023	0.0005	0.0036	11.20	0.81	0.27
VFW	Industrial	0.0006	0.0029	0.0006	0.0039	9.99	0.86	0.36
Impact Church	Traffic/Commercial	0.0006	0.0022	0.0005	0.0026	12.38	0.8	0.78
CRC	Residential	0.0006	0.0024	0.0004	0.0020	8.44	0.79	0.39
California 2019 (Annual)		0.0011	0.0045	0.0040	0.0224	5.26 ^a	--	--

Source: Sonoma Technology, Quantification of Local-Scale Benzene and Other Mobile Source Air Toxics in Sacramento's Communities report (December 2024)

a: Annual Average for Los Angeles between January 2020 and December 2021, as calculated from data in the EPA AQS database.

5.0 PROJECT RELATED AIR QUALITY IMPACTS

A field investigation was conducted to identify land uses that could be subject to operational and construction impacts from the proposed Project. Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, and parks. Figure 5 depicts sensitive receptors in the Project study area. There are existing single-family residences, open space (park), and industrial uses adjacent to the Project site. There are three (3) single-family residences located between 75-100 feet east of the Project boundary. The CEQA Guidelines, Appendix G, are used to assess the potential significance of Project impacts pursuant to local General Plan policies, Municipal Code standards, or applicable standards of other agencies. Under CEQA, air quality impacts would be considered significant if the project would:

- Air Quality
 - Expose sensitive receptors to substantial pollutant concentrations?

5.1 Thresholds of Significance

The SMAQMD is the agency responsible for monitoring and regulating air pollutant emissions from stationary, area, and indirect sources within Sacramento County. According to the SMAQMD's *Guide To Air Quality Assessment in Sacramento County*, revised in April 2021, a new stationary source of TACs would not be granted authority to construct or permit to operate if it resulted in a cancer risk greater than 10.0 in one million at any off-site receptor, or if it led to an off-site ground-level concentration of non-carcinogenic TACs that would result in a Hazard Index exceeding 1.0. These screening criteria can be used to demonstrate that a project's total emissions would not result in a significant impact as defined by CEQA. It should be noted that the SMAQMD has not established a Cancer Risk or Hazard Index threshold for mobile sources. As a result, the SMAQMD Cancer Risk and Hazard Index thresholds for stationary sources were also applied to mobile sources.

Exposure to various TAC's primarily occurs through inhalation. Cancer and non-cancer health risks are related to the exposure concentration of TACs that will be generated on the Project site. The ambient concentration of TACs at the Project site is influenced by factors such as the emission rate, the distance from the emission source, the local wind speed and direction, the local topography, the land use, etc.

5.1.1 Cancer Risk

Cancer risk is the lifetime probability of developing cancer from exposure to a carcinogen, usually expressed as chances per million. Exposure can occur through direct inhalation or other pathways. To estimate cancer risk from inhalation, the inhalation dose (mg/kg-day) is multiplied by the inhalation cancer potency factor [(mg/kg/day)-1].

Particulate-bound pollutants can also be indirectly absorbed through soil ingestion or skin contact. Other pathways include eating crops grown in contaminated soil and transmission of pollutants to infants via breast milk. Non-inhalation cancer risk is determined using cancer toxicity factors and exposure assumptions.

5.1.2 Non-Cancer Risk

Non-cancer health risk refers to both acute (short-term) and chronic (long-term) adverse health effects other than cancer that may be associated with exposure to air toxics. The commonly used regulatory metric for assessing non-cancer effects is the hazard index (HI), which is the ratio of the estimated exposure level of an air toxic compound to a scientifically derived reference exposure level (REL) for the same compound. RELs generally represent the highest exposure level where no adverse effect has been observed or the lowest exposure level where the onset of an adverse effect has been observed, including a safety factor ranging from 10 to 1000, depending on the source and quality of the scientific data.

If the reported concentration or dose of a given chemical is less than its REL, then the hazard index will be less than 1.0. When more than one chemical is considered, it is assumed that the effects are additive provided the associated chemicals are expected to have an adverse impact on the same target organ system (respiratory system, liver, etc). Thus, chemical-specific hazard indices are summed to arrive at a hazard index for each target organ. For any organ system, a total hazard index exceeding 1.0 indicates a potential health effect.

5.2 Estimate of Toxic Emissions

Air quality impacts were assessed in accordance with methodologies recommended by the SMAQMD and CARB. Project TAC emissions were estimated using the construction phase(s) and construction equipment schedule from the California Emissions Estimator Model (CalEEMod). CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. The Emission Factor model (EMFAC), developed by CARB, was also used in the development of Project TAC emissions.

5.2.1 Project Construction

Construction-related activities would result in emissions of diesel particulate matter (DPM) from the exhaust of off-road, heavy-duty diesel equipment for site preparation (e.g., demolition, clearing, grading); paving; application of architectural coatings; on-road truck travel; and other miscellaneous activities. For construction activity, DPM is the primary toxic air contaminant of concern. Cancer risk was calculated using the most recent version of the OEHHA guidelines for health risk assessments. TAC emissions associated with the construction of the Project were used to assess impacts to adjacent sensitive receptors as shown in Figure 5. It should be noted that emissions of diesel PM would be generated from different locations on the Project site rather than in a single location. Table 4a shows the estimated DPM emissions from on-site construction equipment considering various construction phases. Table 4b shows the estimated PM_{2.5} emissions from on-site construction equipment. Tables 5a, 5b, 6a and 6b show

estimated construction emissions for PM10 and PM2.5 from on-site mobile sources and on-site idling from mobile sources.

Tables 7 and 8 identify the impact of Project construction emissions, considering dispersion modeling, at adjacent sensitive receptors which represent the maximally exposed individuals. Results of the analysis show that TAC emissions at residences adjacent to the Project site (sensitive receptors 2, 3, and 4) would exceed the 10 in one million threshold from construction activities. Implementation of Mitigation Measure AQ-1 would be required to reduce substantial pollutant concentrations during Project construction.

- **Mitigation Measure AQ-1** - During Project construction, the Project contractor or Project representatives shall ensure that all off-road diesel-powered construction equipment used for grading and building construction meets the CARB Tier 4 emissions standards or equivalent.

Tables 9a and 9b show the estimated DPM and PM2.5 emissions from on-site construction equipment considering Mitigation Measure AQ-1. Table 10 shows that there is a ***less than significant impact*** from Project construction emissions with implementation of Mitigation Measure AQ-1.

5.2.2 Project Operations

As noted previously, the specific operations of the Project site are unknown at this time as the property developer intends to develop the site and lease the building to interested business(es). Conservative assumptions consistent with typical warehouse uses were utilized, as appropriate, to estimate TACs associated with Project operations. In the event a manufacturing type and/or stationary source emitting business seeks to lease the building, an updated project-specific HRA would be required.

Truck trips associated with the Project were derived from the Fontana Truck Trip Generation Study (August 2003) which resulted in an estimated 31 daily truck trips. The Institute of Transportation Engineers (ITE) Trip Generation Handbook (12th Edition) Warehouse (Land Use 150) and General Light Industrial (Land Use 110) land uses yield a daily truck trip volume of 29 and 17, respectively, considering a square footage of 67,612. Truck trips derived from the Fontana Truck Trip Generation Study yield a greater daily truck trip volume for the proposed Project and was ultimately used in this analysis.

The principal sources or processes from the Project that have the potential to emit various TAC's include diesel emissions from Truck Traffic and Truck Idling. The characteristics of the Project, typical warehouse uses, are not consistent with the land use categories presented in Table 2. However, Vehicle DPM emissions were estimated using emission factors for particulate matter less than 10µm in diameter (PM10) generated with the 2021 version of EMFAC developed by the ARB. It should be noted that EMFAC 2017 was used where EMFAC 2021 data was unavailable (i.e. T7 Single Construction Vehicle Class). EMFAC is a mathematical model that was developed to calculate emission rates from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by CARB to project changes in future emissions from on-road mobile sources. EMFAC incorporates regional motor vehicle

data, information and estimates regarding the distribution of vehicle miles traveled (VMT) by speed, and number of starts per day.

For this Project, annual average PM₁₀ and PM_{2.5} emission factors were generated by running EMFAC 2021 for vehicles in Sacramento County. The EMFAC model generates emission factors in terms of grams of pollutant emitted per vehicle activity and can calculate a matrix of emission factors at specific values of temperature, relative humidity, and vehicle speed. The model was run for speeds traveled in the vicinity of the Project. It was assumed that trucks traveled at 10 miles per hour while performing onsite driving and maneuvering. Emissions estimates for diesel operated vehicles are shown in Tables 11 and 12.

Tables 13 and 14 identify the impact of Project operational emissions, considering dispersion modeling, at adjacent sensitive receptors which represent the maximally exposed individuals. Results of the analysis show that TAC emissions at sensitive receptors adjacent to the Project site would not exceed applicable significant thresholds considering Project operations. TAC emissions generated during Project operations would not expose sensitive receptors to substantial pollutant concentrations. Therefore, mitigation is not warranted since there is a ***less than significant impact*** from Project operational emissions.

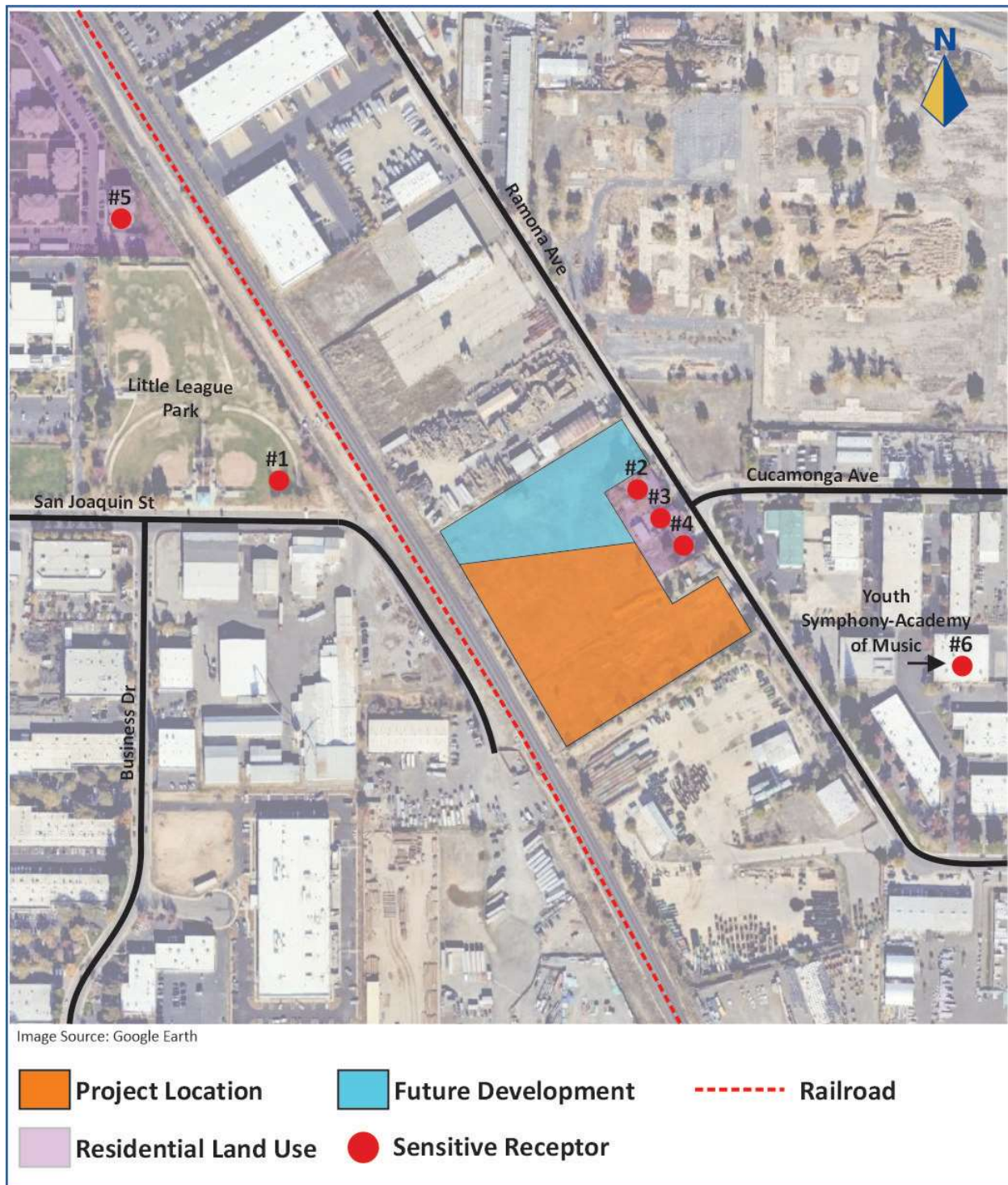


FIGURE 5
Sensitive Receptors

TABLE 4a
ON-SITE CONSTRUCTION EQUIPMENT PM10 EMISSIONS

Scenario	Construction Phase	Equipment Type	Quantity	HP	Daily Operation (hrs/day)	Work Days (per phase)	Total Operation Hours (hrs)	Load Factor	Emission Factor (g/hp-hr)	Annual Emission Estimate (lbs/yr)	Normalized Hourly Emission Estimate (lbs/hr)
Project Construction	Site Preparation	Rubber Tired Dozers	3	367	8	5	120	0.40	0.15	5.86	0.04887
	Site Preparation	Tractors/Loaders/Backhoes	4	84	8	5	160	0.37	0.09	0.93	0.00582
	Grading	Excavators	1	36	8	15	120	0.38	0.11	0.39	0.00323
	Grading	Graders	1	148	8	15	120	0.41	0.15	2.44	0.02033
	Grading	Rubber Tired Dozers	1	367	8	15	120	0.40	0.15	5.86	0.04887
	Grading	Tractors/Loaders/Backhoes	3	84	8	15	360	0.37	0.09	2.10	0.00582
	Building Construction	Cranes	1	367	7	195	1,365	0.29	0.09	28.18	0.02065
	Building Construction	Forklifts	3	82	8	195	4,680	0.20	0.14	23.69	0.00506
	Building Construction	Tractors/Loaders/Backhoes	3	84	7	195	4,095	0.37	0.09	23.85	0.00582
	Building Construction	Generator Sets	1	14	8	195	1,560	0.74	0.18	6.34	0.00407
	Building Construction	Welders	1	46	8	195	1,560	0.45	0.11	7.97	0.00511
	Paving	Pavers	2	81	8	15	240	0.42	0.19	3.42	0.01425
	Paving	Rollers	2	36	8	15	240	0.38	0.17	1.21	0.00504
	Paving	Paving Equipment	2	89	8	15	240	0.36	0.12	2.00	0.00833
	Architectural Coating	Air Compressors	1	37	6	15	90	0.48	0.12	0.41	0.00454
Total PM₁₀ Emissions										114.66	0.20582

Source:

Construction Phase: CalEEMod Default
Equipment Type: CalEEMod Default
Quantity: CalEEMod Default
Source for HP: CalEEMod Default
Source for Load Factor: CalEEMod Default
Source for Emission Factor: CalEEMod Default

TABLE 4b
ON-SITE CONSTRUCTION EQUIPMENT PM2.5 EMISSIONS

Scenario	Construction Phase	Equipment Type	Quantity	HP	Daily Operation (hrs/day)	Work Days (per phase)	Total Operation Hours (hrs)	Load Factor	Emission Factor (g/hp-hr)	Annual Emission Estimate (lbs/yr)	Normalized Hourly Emission Estimate (lbs/hr)
Project Construction	Site Preparation	Rubber Tired Dozers	3	367	8	5	120	0.40	0.14	5.40	0.04499
	Site Preparation	Tractors/Loaders/Backhoes	4	84	8	5	160	0.37	0.08	0.87	0.00541
	Grading	Excavators	1	36	8	15	120	0.38	0.10	0.36	0.00299
	Grading	Graders	1	148	8	15	120	0.41	0.14	2.25	0.01873
	Grading	Rubber Tired Dozers	1	367	8	15	120	0.40	0.14	5.40	0.04499
	Grading	Tractors/Loaders/Backhoes	3	84	8	15	360	0.37	0.08	1.95	0.00541
	Building Construction	Cranes	1	367	7	195	1,365	0.29	0.08	25.94	0.01901
	Building Construction	Forklifts	3	82	8	195	4,680	0.20	0.13	21.66	0.00463
	Building Construction	Tractors/Loaders/Backhoes	3	84	7	195	4,095	0.37	0.08	22.17	0.00541
	Building Construction	Generator Sets	1	14	8	195	1,560	0.74	0.18	6.34	0.00407
	Building Construction	Welders	1	46	8	195	1,560	0.45	0.11	7.97	0.00511
	Paving	Pavers	2	81	8	15	240	0.42	0.18	3.15	0.01313
	Paving	Rollers	2	36	8	15	240	0.38	0.15	1.11	0.00464
	Paving	Paving Equipment	2	89	8	15	240	0.36	0.11	1.83	0.00763
	Architectural Coating	Air Compressors	1	37	6	15	90	0.48	0.12	0.41	0.00454
Total PM_{2.5} Emissions										106.80	0.19067

Source:

Construction Phase: CalEEMod Default
Equipment Type: CalEEMod Default
Quantity: CalEEMod Default
Source for HP: CalEEMod Default
Source for Load Factor: CalEEMod Default
Source for Emission Factor: CalEEMod Default

TABLE 5a
CONSTRUCTION MOBILE SOURCES PM10 EMISSIONS

Scenario	Construction Phase	Trip Type	EMFAC Vehicle Class	One-Way Trips Per Day	Miles per Trip	Work Days (per phase)	Total Distance (miles)	Emission Factors ⁽¹⁾ (gms/mile)	Emission Factors (lbs/VMT)	Annual Emission Estimate (lbs/yr)	Normalized Hourly Emission Estimate (lbs/hr)
Project Construction	Site Preparation	Worker	LDT2	17.5	14.3	5	1,251	0.0109	2.40E-05	0.03	0.00025
	Grading	Worker	LDT2	15	14.3	15	3,218	0.0109	2.40E-05	0.08	0.00021
	Grading	Hauling	T7 Single Construction ²	25	20	15	7,500	0.0138	3.04E-05	0.23	0.00063
	Building Construction	Worker	LDT2	24.8	14.3	195	69,155	0.0109	2.40E-05	1.66	0.00035
	Building Construction	Vendor	T7 Single Construction ²	11.1	8.8	195	19,048	0.0138	3.04E-05	0.58	0.00012
	Paving	Worker	LDT2	15	14.3	15	3,218	0.0109	2.40E-05	0.08	0.00021
	Architectural Coating	Worker	LDT2	4.97	14.3	15	1,066	0.0109	2.40E-05	0.03	0.00007
Total PM₁₀ Emissions										2.68	0.00186

Source:

Construction Phase: CalEEMod Default

Trip Type: CalEEMod Default

Trips Per Day: CalEEMod Default

Miles per Trip: CalEEMod Default

Work Days: CalEEMod Default

(1) Emission Factors source: EMFAC2017 for Sacramento County Year 2025, for speed distribution of 10 mph

(2) Data for EMFAC 2021 was unavailable at the time of this analysis. EMFAC2017 data was used instead.

TABLE 5b
CONSTRUCTION MOBILE SOURCES PM2.5 EMISSIONS

Scenario	Construction Phase	Trip Type	EMFAC Vehicle Class	One-Way Trips Per Day	Miles per Trip	Work Days (per phase)	Total Distance (miles)	Emission Factors ⁽¹⁾ (gms/mile)	Emission Factors (lbs/VMT)	Annual Emission Estimate (lbs/yr)	Normalized Hourly Emission Estimate (lbs/hr)
Project Construction	Site Preparation	Worker	LDT2	17.5	14.3	5	1,251	0.0104	2.30E-05	0.03	0.00024
	Grading	Worker	LDT2	15	14.3	15	3,218	0.0104	2.30E-05	0.07	0.00021
	Grading	Hauling	T7 Single Construction ²	25	20	15	7,500	0.0132	2.91E-05	0.22	0.00061
	Building Construction	Worker	LDT2	24.8	14.3	195	69,155	0.0104	2.30E-05	1.59	0.00034
	Building Construction	Vendor	T7 Single Construction ²	11.1	8.8	195	19,048	0.0132	2.91E-05	0.55	0.00012
	Paving	Worker	LDT2	15	14.3	15	3,218	0.0104	2.30E-05	0.07	0.00021
	Architectural Coating	Worker	LDT2	4.97	14.3	15	1,066	0.0104	2.30E-05	0.02	0.00007
Total PM_{2.5} Emissions										2.56	0.00178

Source:

Construction Phase: CalEEMod Default

Trip Type: CalEEMod Default

Trips Per Day: CalEEMod Default

Miles per Trip: CalEEMod Default

Work Days: CalEEMod Default

(1) Emission Factors source: EMFAC2017 for Sacramento County Year 2025, for speed distribution of 10 mph

(2) Data for EMFAC 2021 was unavailable at the time of this analysis. EMFAC2017 data was used instead.

TABLE 6a
CONSTRUCTION MOBILE SOURCES (IDLING) PM10 EMISSIONS

Scenario	Construction Phase	Trip Type	EMFAC Vehicle Class ⁽¹⁾	One-Way Trips Per Day	Idle Time per Trip ⁽²⁾ (hrs/trip)	Work Days (per phase)	Idle Emission Factors ⁽³⁾ (g/day-vehicle)	Idle Emission Factors (lbs/hr-veh)	Annual Emission Estimate (lbs/yr)	Normalized Hourly Emission Estimate (lbs/hr)
Project Construction	Site Preparation	Worker	LDT2	17.5	0.09	5	0.0279	2.56E-06	0.00002	1.68E-07
	Grading	Worker	LDT2	15	0.09	15	0.0279	2.56E-06	0.00005	1.44E-07
	Grading	Hauling	T7 Single Construction ⁴	25	0.09	15	0.0075	6.85E-07	0.00002	6.42E-08
	Building Construction	Worker	LDT2	24.8	0.09	195	0.0279	2.56E-06	0.00112	2.39E-07
	Building Construction	Vendor	T7 Single Construction ⁴	11.1	0.09	195	0.0075	6.85E-07	0.00013	2.85E-08
	Paving	Worker	LDT2	15	0.09	15	0.0279	2.56E-06	0.00005	1.44E-07
	Architectural Coating	Worker	LDT2	4.97	0.09	15	0.0279	2.56E-06	0.00002	4.78E-08
Total PM₁₀ Emissions									0.00139	7.72E-07

Source:

- (1) PM10 Emission Factors aren't provided for EMFAC's LDT2. PM10 Emission Factor for LHD1 used as surrogate
(2) Assumes 5 minute idle time
(3) Emission Factors source: EMFAC2017 for Sacramento County Year 2025
(4) Data for EMFAC 2021 was unavailable at the time of this analysis. EMFAC2017 data was used instead.

TABLE 6b
CONSTRUCTION MOBILE SOURCES (IDLING) PM2.5 EMISSIONS

Scenario	Construction Phase	Trip Type	EMFAC Vehicle Class ⁽¹⁾	One-Way Trips Per Day	Idle Time per Trip ⁽²⁾ (hrs/trip)	Work Days (per phase)	Idle Emission Factors ⁽³⁾ (g/day-vehicle)	Idle Emission Factors (lbs/hr-veh)	Annual Emission Estimate (lbs/yr)	Normalized Hourly Emission Estimate (lbs/hr)
Project Construction	Site Preparation	Worker	LDT2	17.5	0.09	5	0.0267	2.45E-06	0.00002	1.61E-07
	Grading	Worker	LDT2	15	0.09	15	0.0267	2.45E-06	0.00005	1.38E-07
	Grading	Hauling	T7 Single Construction ⁴	25	0.09	15	0.0071	6.55E-07	0.00002	6.14E-08
	Building Construction	Worker	LDT2	24.8	0.09	195	0.0267	2.45E-06	0.00107	2.28E-07
	Building Construction	Vendor	T7 Single Construction ⁴	11.1	0.09	195	0.0071	6.55E-07	0.00013	2.73E-08
	Paving	Worker	LDT2	15	0.09	15	0.0267	2.45E-06	0.00005	1.38E-07
	Architectural Coating	Worker	LDT2	4.97	0.09	15	0.0267	2.45E-06	0.00002	4.57E-08
Total PM_{2.5} Emissions									0.00133	7.38E-07

Source:

- (1) PM10 Emission Factors aren't provided for EMFAC's LDT2. PM10 Emission Factor for LHD1 used as surrogate
(2) Assumes 5 minute idle time
(3) Emission Factors source: EMFAC2017 for Sacramento County Year 2025
(4) Data for EMFAC 2021 was unavailable at the time of this analysis. EMFAC2017 data was used instead.

TABLE 7
CANCER RISK FROM PROJECT CONSTRUCTION EMISSIONS

Receptor		Carcinogenic Inhalation Health Risk	Threshold of Significance	Exceed Threshold?
Receptor 1	Little League Park	5.69E-06	1.00E-05	No
Receptor 2	Residence	4.16E-05	1.00E-05	Yes
Receptor 3	Residence	3.43E-05	1.00E-05	Yes
Receptor 4	Residence	2.54E-05	1.00E-05	Yes
Receptor 5	Lark Apartments	2.69E-06	1.00E-05	No
Receptor 6	Youth Symphony	3.56E-06	1.00E-05	No

TABLE 8
NON-CANCER RISK FROM PROJECT CONSTRUCTION EMISSIONS

Receptor		Non-Cancer (Hazard Index) Health Risk	Threshold of Significance	Exceed Threshold?
Receptor 1	Little League Park	6.40E-03	1.00E+00	No
Receptor 2	Residence	4.68E-02	1.00E+00	No
Receptor 3	Residence	3.86E-02	1.00E+00	No
Receptor 4	Residence	2.86E-02	1.00E+00	No
Receptor 5	Lark Apartments	3.03E-03	1.00E+00	No
Receptor 6	Youth Symphony	4.00E-03	1.00E+00	No

TABLE 9a
ON-SITE CONSTRUCTION EQUIPMENT PM10 EMISSIONS WITH MITIGATION

irio	Construction Phase	Equipment Type	Quantity	HP	Daily Operation (hrs/day)	Work Days (per phase)	Total Operation Hours (hrs)	Load Factor	Emission Factor (g/hp-hr)	Annual Emission Estimate (lbs/yr)	Normalized Hourly Emission Estimate (lbs/hr)
Project Construction	Site Preparation	Rubber Tired Dozers	3	367	8	5	120	0.40	0.15	5.86	0.04887
	Site Preparation	Tractors/Loaders/Backhoes	4	84	8	5	160	0.37	0.09	0.93	0.00582
	Grading	Excavators	1	36	8	15	120	0.38	0.01	0.03	0.00024
	Grading	Graders	1	148	8	15	120	0.41	0.01	0.13	0.00107
	Grading	Rubber Tired Dozers	1	367	8	15	120	0.40	0.01	0.31	0.00259
	Grading	Tractors/Loaders/Backhoes	3	84	8	15	360	0.37	0.01	0.20	0.00055
	Building Construction	Cranes	1	367	7	195	1,365	0.29	0.01	2.56	0.00188
	Building Construction	Forklifts	3	82	8	195	4,680	0.20	0.01	1.35	0.00029
	Building Construction	Tractors/Loaders/Backhoes	3	84	7	195	4,095	0.37	0.01	2.24	0.00055
	Building Construction	Generator Sets	1	14	8	195	1,560	0.74	0.01	0.29	0.00018
	Building Construction	Welders	1	46	8	195	1,560	0.45	0.01	0.57	0.00037
	Paving	Pavers	2	81	8	15	240	0.42	0.19	3.42	0.01425
	Paving	Rollers	2	36	8	15	240	0.38	0.17	1.21	0.00504
	Paving	Paving Equipment	2	89	8	15	240	0.36	0.12	2.00	0.00833
	Architectural Coating	Air Compressors	1	37	6	15	90	0.48	0.12	0.41	0.00454
Total PM₁₀ Emissions										21.51	0.09457

Source:

Construction Phase: CalEEMod Default

Equipment Type: CalEEMod Default

Quantity: CalEEMod Default

Source for HP: CalEEMod Default

Source for Load Factor: CalEEMod Default

Source for Emission Factor: CalEEMod Default for Site Preparation, Paving, and Architectural Coating. Emission Factors for Grading and Building Construction derived from CARB Emission Factors for Tier 4 Construction Equipment

TABLE 9b
ON-SITE CONSTRUCTION EQUIPMENT PM2.5 EMISSIONS WITH MITIGATION

irio	Construction Phase	Equipment Type	Quantity	HP	Daily Operation (hrs/day)	Work Days (per phase)	Total Operation Hours (hrs)	Load Factor	Emission Factor (g/hp-hr)	Annual Emission Estimate (lbs/yr)	Normalized Hourly Emission Estimate (lbs/hr)
Project Construction	Site Preparation	Rubber Tired Dozers	3	367	8	5	120	0.40	0.14	5.40	0.04499
	Site Preparation	Tractors/Loaders/Backhoes	4	84	8	5	160	0.37	0.08	0.87	0.00541
	Grading	Excavators	1	36	8	15	120	0.38	0.01	0.03	0.00023
	Grading	Graders	1	148	8	15	120	0.41	0.01	0.12	0.00104
	Grading	Rubber Tired Dozers	1	367	8	15	120	0.40	0.01	0.30	0.00251
	Grading	Tractors/Loaders/Backhoes	3	84	8	15	360	0.37	0.01	0.19	0.00053
	Building Construction	Cranes	1	367	7	195	1,365	0.29	0.01	2.49	0.00182
	Building Construction	Forklifts	3	82	8	195	4,680	0.20	0.01	1.31	0.00028
	Building Construction	Tractors/Loaders/Backhoes	3	84	7	195	4,095	0.37	0.01	2.18	0.00053
	Building Construction	Generator Sets	1	14	8	195	1,560	0.74	0.01	0.28	0.00018
	Building Construction	Welders	1	46	8	195	1,560	0.45	0.01	0.55	0.00035
	Paving	Pavers	2	81	8	15	240	0.42	0.18	3.15	0.01313
	Paving	Rollers	2	36	8	15	240	0.38	0.15	1.11	0.00464
	Paving	Paving Equipment	2	89	8	15	240	0.36	0.11	1.83	0.00763
	Architectural Coating	Air Compressors	1	37	6	15	90	0.48	0.12	0.41	0.00454
Total PM_{2.5} Emissions										20.22	0.08782

Source:

Construction Phase: CalEEMod Default

Equipment Type: CalEEMod Default

Quantity: CalEEMod Default

Source for HP: CalEEMod Default

Source for Load Factor: CalEEMod Default

Source for Emission Factor: CalEEMod Default for Site Preparation, Paving, and Architectural Coating. Emission Factors for Grading and Building Construction derived from CARB Emission Factors for Tier 4 Construction Equipment

TABLE 10
CANCER RISK FROM PROJECT CONSTRUCTION EMISSIONS WITH MITIGATION

Receptor		Carcinogenic Inhalation Health Risk	Threshold of Significance	Exceed Threshold?
Receptor 1	Little League Park	1.15E-06	1.00E-05	No
Receptor 2	Residence	9.34E-06	1.00E-05	No
Receptor 3	Residence	8.83E-06	1.00E-05	No
Receptor 4	Residence	8.24E-06	1.00E-05	No
Receptor 5	Lark Apartments	5.50E-07	1.00E-05	No
Receptor 6	Youth Symphony	7.73E-07	1.00E-05	No

TABLE 11
ONSITE ON-ROAD MOBILE SOURCE EMISSIONS

Pollutant	Vehicle Type	EMFAC Vehicle Class	Maximum Daily Trips (trips/day)	Total Annual Round-Trips (trips/yr)	Round-Trip Distance (miles)	Emission Factors ⁽¹⁾ (gms/mile)	Emission Factors (lbs/VMT)	Annual Emissions (lbs/mile/yr)	Maximum Daily Emission Estimate (lbs/day)	Annual Average Emission Estimate (tons/yr)
ROG Exhaust	Product Trucks - Outside Sales	T7	31	16120	0.2	0.065	1.426E-04	2.3	0.000884	0.000115
							Total ROG Emissions	2.3	0.000884	0.000115
TOG Exhaust	Product Trucks - Outside Sales	T7	31	16120	0.2	0.074	1.623E-04	2.6	0.001006	0.000131
							Total TOG Emissions	2.6	0.001006	0.000131
SO _x Exhaust	Product Trucks - Outside Sales	T7	31	16120	0.2	0.027	5.891E-05	0.9	0.000365	0.000047
							Total SO_x Emissions	0.9	0.000365	0.000047
CO Exhaust	Product Trucks - Outside Sales	T7	31	16120	0.2	0.642	1.415E-03	22.8	0.008774	0.001141
							Total CO Emissions	22.8	0.008774	0.001141
NO _x Exhaust	Product Trucks - Outside Sales	T7	31	16120	0.2	5.691	1.255E-02	202.3	0.077794	0.010113
							Total NO_x Emissions	202.3	0.077794	0.010113
CO ₂ Exhaust	Product Trucks - Outside Sales	T7	31	16120	0.2	2821.714	6.221E+00	100,279.5	38.569045	5.013976
							Total CO₂ Emissions	100,279.5	38.569045	5.013976
PM ₁₀ Exhaust	Product Trucks - Outside Sales	T7	31	16120	0.2	0.007	1.550E-05	0.2	0.000096	0.000012
							Total PM₁₀ Emissions	0.2	0.000096	0.000012
PM _{2.5} Exhaust	Product Trucks - Outside Sales	T7	31	16120	0.2	0.007	1.483E-05	0.2	0.000092	0.000012
							Total PM_{2.5} Emissions	0.2	0.000092	0.000012

References:

(1) Emission Factors source: EMFAC2021 for Sacramento County Year 2025, for speed distribution of 10 mph

Assumptions:

Maximum 31 Daily Truck Trips

TABLE 12
ONSITE ON-ROAD MOBILE SOURCE IDLING EMISSIONS

Pollutant	Vehicle Type	EMFAC Vehicle Class	Maximum Daily Trips (trips/day)	Total Annual Round-Trips (trips/yr)	Idle Time per Trip ⁽¹⁾ (hrs/trip)	Idle Emission Factors ⁽²⁾ (g/hr-veh)	Idle Emission Factors (lbs/hr-veh)	Maximum Daily Emission Estimate (lbs/day)	Annual Average Emission Estimate (tons/yr)
ROG Exhaust	Product Trucks - Outside Sales	T7	31	16120	0.09	1.876	4.14E-03	0.011542	0.001500
	Total ROG Emissions							0.011542	0.001500
TOG Exhaust	Product Trucks - Outside Sales	T7	31	16120	0.09	2.136	4.71E-03	0.013140	0.001708
	Total TOG Emissions							0.013140	0.001708
CO Exhaust	Product Trucks - Outside Sales	T7	31	16120	0.09	27.146	5.98E-02	0.166974	0.021707
	Total CO Emissions							0.166974	0.021707
NO _x Exhaust	Product Trucks - Outside Sales	T7	31	16120	0.09	21.620	4.77E-02	0.132985	0.017288
	Total NO_x Emissions							0.132985	0.017288
CO ₂ Exhaust	Product Trucks - Outside Sales	T7	31	16120	0.09	4481.077	9.88E+00	27.562645	3.583144
	Total CO₂ Emissions							27.562645	3.583144
SO _x Exhaust	Product Trucks - Outside Sales	T7	31	16120	0.09	0.042	9.35E-05	0.000261	0.000034
	Total SO_x Emissions							0.000261	0.000034
PM ₁₀ Exhaust	Product Trucks - Outside Sales	T7	31	16120	0.09	0.014	3.06E-05	0.000085	0.000011
	Total PM₁₀ Emissions							0.000085	0.000011
PM _{2.5} Exhaust	Product Trucks - Outside Sales	T7	31	16120	0.09	0.013	2.93E-05	0.000082	0.000011
	Total PM_{2.5} Emissions							0.000082	0.000011

References:

(1) Assumes 5 minute idle time

(2) Emission Factors source: EMFAC2021 for Sacramento County Year 2025.

Assumptions:

Maximum 31 Daily Truck Trips

TABLE 13
CANCER RISK FROM PROJECT OPERATIONAL EMISSIONS

Receptor	Carcinogenic Inhalation Health Risk	Threshold of Significance	Exceed Threshold?
Receptor 1 Little League Park	7.46E-09	1.00E-05	No
Receptor 2 Residence	1.04E-07	1.00E-05	No
Receptor 3 Residence	1.46E-07	1.00E-05	No
Receptor 4 Residence	2.02E-07	1.00E-05	No
Receptor 5 Lark Apartments	4.91E-09	1.00E-05	No
Receptor 6 Youth Symphony	7.56E-09	1.00E-05	No

TABLE 14
NON-CANCER RISK FROM PROJECT OPERATIONAL EMISSIONS

Receptor		Non-Cancer (Hazard Index) Health Risk	Threshold of Significance	Exceed Threshold?
Receptor 1	Little League Park	1.51E-06	1.00E+00	No
Receptor 2	Residence	2.11E-05	1.00E+00	No
Receptor 3	Residence	2.95E-05	1.00E+00	No
Receptor 4	Residence	4.10E-05	1.00E+00	No
Receptor 5	Lark Apartments	9.95E-07	1.00E+00	No
Receptor 6	Youth Symphony	1.53E-06	1.00E+00	No

5.3 Naturally Occurring Asbestos

Naturally Occurring Asbestos (NOA) refers to several types fibrous minerals found in California, mainly chrysotile. These minerals are often located in ultramafic rock and near fault zones, with asbestos content ranging from less than 1% to over 25%. Asbestos is released when these rocks are broken or crushed, such as by driving on unpaved roads, land grading, or quarrying. Weathering and erosion also release asbestos, which can become airborne and pose health risks including lung disease and cancer, depending on exposure levels and duration. The longer a person is exposed to asbestos and the greater the intensity of the exposure, the greater the chances for health issues.

The Project's construction phase may cause asbestos to become airborne due to construction activities that will occur on site. The Project would be required to comply with Rule 403, which aims to regulate operations that periodically cause fugitive dust emissions into the atmosphere. The Project is also subject to the following Enhanced Fugitive PM Dust Control Practices:

- Soil Disturbance Areas
 - Water exposed soil with adequate frequency for continued moist soil. However, do not overwater to the extent that sediment flows off the site.
 - Suspend excavation, grading, and/or demolition activity when wind speeds exceed 20 mph.
 - Install wind breaks (e.g., plant trees, solid fencing) on windward side(s) of construction areas.
 - Plant vegetative ground cover (fast-germinating native grass seed) in disturbed areas as soon as possible. Water appropriately until vegetation is established.

- Unpaved Roads (Entrained Road Dust)
 - Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site.
 - Treat site accesses to a distance of 100 feet from the paved road with a 6 to 12-inch layer of wood chips, mulch, or gravel to reduce generation of road dust and road dust carryout onto public roads.
 - Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The phone number of the District shall also be visible to ensure compliance.

The Department of Conservation California Geological Survey prepared the *Relative Likelihood For The Presence Of Naturally Occurring Asbestos In Eastern Sacramento County, California* (2006), which identifies areas within eastern Sacramento County that are likely to have NOA. The areas that are moderately likely to contain NOA are found along a northerly trending region that extends from Folsom Lake to the Cosumnes River. These areas include parts of the communities of Folsom and Rancho Murieta. The Project site is located within “areas least likely to contain NOA” based upon data presented in the report prepared by the Department of Conservation California Geological Survey. The construction phase of the Project will have a less than significant impact on sensitive receptors with respect to NOA given the requirements of Rule 403 and the presumed lack of NOA on the Project site. Therefore, mitigation is not warranted since there is a less than significant impact from Project construction emissions.

REFERENCES

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- City of Fontana, County of San Bernardino, State of California *Truck Trip Generation Study*, August 2003
- Institute of Transportation Engineers (ITE) *Trip Generation Handbook*, 12th Edition

APPENDIX A

CalEEMod Worksheets from Air Study



Ramona Opportunity Industrial Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Ramona Opportunity Industrial
Construction Start Date	2/2/2026
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	37.8
Location	38.54466162587582, -121.41533652036134
County	Sacramento
City	Sacramento
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	766
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
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	31.9	1000sqft	3.30	31,905	69,411	—	—	—

General Office Building	35.7	1000sqft	0.00	35,707	—	—	—	—
Parking Lot	104	1000sqft	2.39	0.00	—	—	—	—
Other Asphalt Surfaces	2.73	1000sqft	0.06	0.00	—	—	—	Outdoor Patio

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.	1.42	1.18	10.5	14.6	0.03	0.38	0.33	0.72	0.35	0.08	0.43	—	2,988	2,988	0.12	0.08	1.74	3,015
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	33.5	33.5	29.2	29.5	0.05	1.24	7.72	8.40	1.14	3.59	4.22	—	5,471	5,471	0.29	0.32	0.11	5,491
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.80	1.64	7.08	9.27	0.02	0.26	0.50	0.76	0.24	0.19	0.43	—	1,933	1,933	0.08	0.06	0.49	1,953
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.33	0.30	1.29	1.69	< 0.005	0.05	0.09	0.14	0.04	0.04	0.08	—	320	320	0.01	0.01	0.08	323

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	1.42	1.18	10.5	14.6	0.03	0.38	0.33	0.72	0.35	0.08	0.43	—	2,988	2,988	0.12	0.08	1.74	3,015
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	33.5	33.5	29.2	29.5	0.05	1.24	7.72	8.40	1.14	3.59	4.22	—	5,471	5,471	0.29	0.32	0.11	5,491
2027	33.5	33.5	0.85	1.32	< 0.005	0.02	0.05	0.07	0.02	0.01	0.03	—	182	182	0.01	< 0.005	< 0.005	183
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.80	1.64	7.08	9.27	0.02	0.26	0.50	0.76	0.24	0.19	0.43	—	1,933	1,933	0.08	0.06	0.49	1,953
2027	0.52	0.52	0.01	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.86	2.86	< 0.005	< 0.005	< 0.005	2.88
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.33	0.30	1.29	1.69	< 0.005	0.05	0.09	0.14	0.04	0.04	0.08	—	320	320	0.01	0.01	0.08	323
2027	0.10	0.10	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.47	0.47	< 0.005	< 0.005	< 0.005	0.48

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.	4.07	3.88	1.74	16.9	0.03	0.05	2.53	2.59	0.05	0.64	0.69	63.4	4,718	4,781	3.72	0.20	9.62	4,943
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.37	3.20	1.95	12.2	0.03	0.05	2.53	2.58	0.05	0.64	0.69	63.4	4,445	4,509	3.74	0.21	0.33	4,665
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	3.73	3.54	1.87	13.9	0.03	0.05	2.47	2.52	0.05	0.63	0.68	63.4	4,507	4,571	3.73	0.20	4.20	4,729
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.68	0.65	0.34	2.54	0.01	0.01	0.45	0.46	0.01	0.11	0.12	10.5	746	757	0.62	0.03	0.70	783

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	1.92	1.78	1.37	13.7	0.03	0.02	2.53	2.55	0.02	0.64	0.66	—	3,037	3,037	0.14	0.13	9.53	3,088
Area	2.12	2.08	0.02	2.94	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	12.1	12.1	< 0.005	< 0.005	—	12.1
Energy	0.04	0.02	0.35	0.29	< 0.005	0.03	—	0.03	0.03	—	0.03	—	1,629	1,629	0.08	0.01	—	1,633
Water	—	—	—	—	—	—	—	—	—	—	—	29.3	39.7	69.0	0.10	0.06	—	90.7
Waste	—	—	—	—	—	—	—	—	—	—	—	34.1	0.00	34.1	3.40	0.00	—	119
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.09	0.09
Total	4.07	3.88	1.74	16.9	0.03	0.05	2.53	2.59	0.05	0.64	0.69	63.4	4,718	4,781	3.72	0.20	9.62	4,943
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.74	1.59	1.61	11.9	0.03	0.02	2.53	2.55	0.02	0.64	0.66	—	2,777	2,777	0.16	0.14	0.25	2,823
Area	1.59	1.59	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.04	0.02	0.35	0.29	< 0.005	0.03	—	0.03	0.03	—	0.03	—	1,629	1,629	0.08	0.01	—	1,633
Water	—	—	—	—	—	—	—	—	—	—	—	29.3	39.7	69.0	0.10	0.06	—	90.7
Waste	—	—	—	—	—	—	—	—	—	—	—	34.1	0.00	34.1	3.40	0.00	—	119
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.09	0.09
Total	3.37	3.20	1.95	12.2	0.03	0.05	2.53	2.58	0.05	0.64	0.69	63.4	4,445	4,509	3.74	0.21	0.33	4,665
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	1.74	1.60	1.50	11.6	0.03	0.02	2.47	2.49	0.02	0.63	0.65	—	2,830	2,830	0.15	0.13	4.12	2,878
Area	1.95	1.92	0.02	2.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.28	8.28	< 0.005	< 0.005	—	8.31
Energy	0.04	0.02	0.35	0.29	< 0.005	0.03	—	0.03	0.03	—	0.03	—	1,629	1,629	0.08	0.01	—	1,633
Water	—	—	—	—	—	—	—	—	—	—	—	29.3	39.7	69.0	0.10	0.06	—	90.7
Waste	—	—	—	—	—	—	—	—	—	—	—	34.1	0.00	34.1	3.40	0.00	—	119
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.09	0.09
Total	3.73	3.54	1.87	13.9	0.03	0.05	2.47	2.52	0.05	0.63	0.68	63.4	4,507	4,571	3.73	0.20	4.20	4,729
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.32	0.29	0.27	2.12	0.01	< 0.005	0.45	0.45	< 0.005	0.11	0.12	—	469	469	0.02	0.02	0.68	476
Area	0.36	0.35	< 0.005	0.37	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.37	1.37	< 0.005	< 0.005	—	1.38
Energy	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	270	270	0.01	< 0.005	—	270
Water	—	—	—	—	—	—	—	—	—	—	—	4.86	6.58	11.4	0.02	0.01	—	15.0
Waste	—	—	—	—	—	—	—	—	—	—	—	5.64	0.00	5.64	0.56	0.00	—	19.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	0.68	0.65	0.34	2.54	0.01	0.01	0.45	0.46	0.01	0.11	0.12	10.5	746	757	0.62	0.03	0.70	783

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 Equipm	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
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	0.40	0.39	< 0.005	0.02	—	0.02	0.02	—	0.02	—	72.6	72.6	< 0.005	< 0.005	—	72.8
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	0.07	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.0	12.0	< 0.005	< 0.005	—	12.1
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.73	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	173	173	< 0.005	0.01	0.02	175
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	—	2.43	2.43	< 0.005	< 0.005	< 0.005	2.47
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	—	0.40	0.40	< 0.005	< 0.005	< 0.005	0.41
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.96	1.65	15.0	17.4	0.03	0.65	—	0.65	0.59	—	0.59	—	2,960	2,960	0.12	0.02	—	2,970
Dust From Material Movement	—	—	—	—	—	—	7.10	7.10	—	3.43	3.43	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.62	0.72	< 0.005	0.03	—	0.03	0.02	—	0.02	—	122	122	< 0.005	< 0.005	—	122
Dust From Material Movement	—	—	—	—	—	—	0.29	0.29	—	0.14	0.14	—	—	—	—	—	—	—

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	0.11	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.1	20.1	< 0.005	< 0.005	—	20.2
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.62	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	148	148	< 0.005	0.01	0.02	150
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	0.21	0.05	3.41	1.27	0.01	0.03	0.47	0.51	0.03	0.13	0.16	—	1,812	1,812	0.17	0.29	0.10	1,904
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	—	6.25	6.25	< 0.005	< 0.005	0.01	6.34
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	0.01	< 0.005	0.14	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	74.5	74.5	0.01	0.01	0.07	78.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.04	1.04	< 0.005	< 0.005	< 0.005	1.05
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	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.3	12.3	< 0.005	< 0.005	0.01	13.0

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	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
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	0.68	0.57	5.26	6.93	0.01	0.20	—	0.20	0.19	—	0.19	—	1,281	1,281	0.05	0.01	—	1,285
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	0.12	0.10	0.96	1.26	< 0.005	0.04	—	0.04	0.03	—	0.03	—	212	212	0.01	< 0.005	—	213

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	0.11	0.10	0.06	1.40	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	276	276	< 0.005	0.01	0.99	280
Vendor	0.03	0.01	0.54	0.21	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	314	314	0.02	0.05	0.76	329
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	0.09	0.08	1.03	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	245	245	0.01	0.01	0.03	249
Vendor	0.03	0.01	0.58	0.21	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	314	314	0.02	0.05	0.02	329
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	0.05	0.05	0.04	0.56	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	135	135	< 0.005	0.01	0.23	136
Vendor	0.02	0.01	0.31	0.11	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	168	168	0.01	0.03	0.17	176
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	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.3	22.3	< 0.005	< 0.005	0.04	22.6
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.8	27.8	< 0.005	< 0.005	0.03	29.1
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

3.7. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	7.12	9.94	0.01	0.32	—	0.32	0.29	—	0.29	—	1,511	1,511	0.06	0.01	—	1,516
Paving	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.29	0.41	< 0.005	0.01	—	0.01	0.01	—	0.01	—	62.1	62.1	< 0.005	< 0.005	—	62.3
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	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.3	10.3	< 0.005	< 0.005	—	10.3
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.62	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	148	148	< 0.005	0.01	0.02	150
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	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.25	6.25	< 0.005	< 0.005	0.01	6.34
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.04	1.04	< 0.005	< 0.005	< 0.005	1.05
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

3.9. 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	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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 Coating	33.3	33.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.40	3.40	< 0.005	< 0.005	—	3.41
Architectural Coatings	0.85	0.85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.56	0.56	< 0.005	< 0.005	—	0.56
Architectural Coatings	0.15	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.21	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	49.1	49.1	< 0.005	< 0.005	0.01	49.7
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
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	—	1.28	1.28	< 0.005	< 0.005	< 0.005	1.30
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	—	0.21	0.21	< 0.005	< 0.005	< 0.005	0.22
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

3.11. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (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	33.3	33.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.09	2.09	< 0.005	< 0.005	—	2.10
Architectural Coatings	0.52	0.52	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.35	0.35	< 0.005	< 0.005	—	0.35
Architectural Coatings	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	—	48.2	48.2	< 0.005	< 0.005	< 0.005	48.8
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	—	0.77	0.77	< 0.005	< 0.005	< 0.005	0.78
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

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.24	0.22	0.17	1.69	< 0.005	< 0.005	0.31	0.32	< 0.005	0.08	0.08	—	375	375	0.02	0.02	1.18	381
General Office Building	1.68	1.56	1.20	12.0	0.03	0.02	2.22	2.24	0.02	0.56	0.58	—	2,662	2,662	0.12	0.11	8.35	2,706
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	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	1.92	1.78	1.37	13.7	0.03	0.02	2.53	2.55	0.02	0.64	0.66	—	3,037	3,037	0.14	0.13	9.53	3,088
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrig erated Wareho Rail	0.21	0.20	0.20	1.47	< 0.005	< 0.005	0.31	0.32	< 0.005	0.08	0.08	—	343	343	0.02	0.02	0.03	349
General Office Building	1.52	1.40	1.41	10.4	0.02	0.02	2.22	2.24	0.02	0.56	0.58	—	2,434	2,434	0.14	0.12	0.22	2,474
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	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	1.74	1.59	1.61	11.9	0.03	0.02	2.53	2.55	0.02	0.64	0.66	—	2,777	2,777	0.16	0.14	0.25	2,823
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrig erated Wareho use-No Rail	0.04	0.04	0.03	0.26	< 0.005	< 0.005	0.06	0.06	< 0.005	0.01	0.01	—	57.9	57.9	< 0.005	< 0.005	0.08	58.9
General Office Building	0.28	0.26	0.24	1.86	< 0.005	< 0.005	0.40	0.40	< 0.005	0.10	0.10	—	411	411	0.02	0.02	0.60	418
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	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	0.32	0.29	0.27	2.12	0.01	< 0.005	0.45	0.45	< 0.005	0.11	0.12	—	469	469	0.02	0.02	0.68	476

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	—	—	—	—	—	—	—	—	—	—	—	—	276	276	0.01	< 0.005	—	277
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	844	844	0.03	< 0.005	—	846
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	93.8	93.8	< 0.005	< 0.005	—	94.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,215	1,215	0.04	0.01	—	1,217
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	276	276	0.01	< 0.005	—	277
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	844	844	0.03	< 0.005	—	846
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	93.8	93.8	< 0.005	< 0.005	—	94.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,215	1,215	0.04	0.01	—	1,217
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse Rail	—	—	—	—	—	—	—	—	—	—	—	—	45.8	45.8	< 0.005	< 0.005	—	45.9
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	140	140	< 0.005	< 0.005	—	140
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	15.5	15.5	< 0.005	< 0.005	—	15.6
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	201	201	0.01	< 0.005	—	202

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	33.8	33.8	< 0.005	< 0.005	—	33.8
General Office Building	0.04	0.02	0.32	0.27	< 0.005	0.02	—	0.02	0.02	—	0.02	—	381	381	0.03	< 0.005	—	382
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	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	0.04	0.02	0.35	0.29	< 0.005	0.03	—	0.03	0.03	—	0.03	—	414	414	0.04	< 0.005	—	416

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrig erated Wareho use-No Rail	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	33.8	33.8	< 0.005	< 0.005	—	33.8
General Office Building	0.04	0.02	0.32	0.27	< 0.005	0.02	—	0.02	0.02	—	0.02	—	381	381	0.03	< 0.005	—	382
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	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	0.04	0.02	0.35	0.29	< 0.005	0.03	—	0.03	0.03	—	0.03	—	414	414	0.04	< 0.005	—	416
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrig erated Wareho use-No Rail	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.59	5.59	< 0.005	< 0.005	—	5.60
General Office Building	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.0	63.0	0.01	< 0.005	—	63.2
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	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	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	68.6	68.6	0.01	< 0.005	—	68.8

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	1.46	1.46	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.14	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.52	0.48	0.02	2.94	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	12.1	12.1	< 0.005	< 0.005	—	12.1
Total	2.12	2.08	0.02	2.94	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	12.1	12.1	< 0.005	< 0.005	—	12.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.46	1.46	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.14	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	1.59	1.59	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.27	0.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coating	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.07	0.06	< 0.005	0.37	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.37	1.37	< 0.005	< 0.005	—	1.38
Total	0.36	0.35	< 0.005	0.37	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.37	1.37	< 0.005	< 0.005	—	1.38

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	—	—	—	—	—	—	—	—	—	—	—	15.8	22.1	37.9	0.05	0.03	—	49.5
General Office Building	—	—	—	—	—	—	—	—	—	—	—	13.6	17.6	31.2	0.05	0.03	—	41.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	29.3	39.7	69.0	0.10	0.06	—	90.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrig Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	15.8	22.1	37.9	0.05	0.03	—	49.5
General Office Building	—	—	—	—	—	—	—	—	—	—	—	13.6	17.6	31.2	0.05	0.03	—	41.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	29.3	39.7	69.0	0.10	0.06	—	90.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrig erated Wareho use-No Rail	—	—	—	—	—	—	—	—	—	—	—	2.61	3.66	6.27	0.01	0.01	—	8.20
General Office Building	—	—	—	—	—	—	—	—	—	—	—	2.25	2.92	5.16	0.01	< 0.005	—	6.82
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4.86	6.58	11.4	0.02	0.01	—	15.0

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 erated Wareho use-No Rail	—	—	—	—	—	—	—	—	—	—	—	16.2	0.00	16.2	1.62	0.00	—	56.5
General Office Building	—	—	—	—	—	—	—	—	—	—	—	17.9	0.00	17.9	1.79	0.00	—	62.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	34.1	0.00	34.1	3.40	0.00	—	119
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrig erated Wareho use-No Rail	—	—	—	—	—	—	—	—	—	—	—	16.2	0.00	16.2	1.62	0.00	—	56.5
General Office Building	—	—	—	—	—	—	—	—	—	—	—	17.9	0.00	17.9	1.79	0.00	—	62.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	34.1	0.00	34.1	3.40	0.00	—	119
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse Rail	—	—	—	—	—	—	—	—	—	—	—	2.68	0.00	2.68	0.27	0.00	—	9.36
General Office Building	—	—	—	—	—	—	—	—	—	—	—	2.96	0.00	2.96	0.30	0.00	—	10.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5.64	0.00	5.64	0.56	0.00	—	19.7

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.09	0.09
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.09	0.09
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.09	0.09
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.09	0.09
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01

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)

Equipm ent 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)

Equipm ent 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)

Equipm ent 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)

Vegetati on	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	2/2/2026	2/6/2026	5.00	5.00	—
Grading	Grading	2/7/2026	2/27/2026	5.00	15.0	—
Building Construction	Building Construction	2/28/2026	11/27/2026	5.00	195	—
Paving	Paving	11/28/2026	12/18/2026	5.00	15.0	—
Architectural Coating	Architectural Coating	12/19/2026	1/8/2027	5.00	15.0	—

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/Back hoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Back hoes	Diesel	Average	3.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
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	Tractors/Loaders/Back hoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
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
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.80	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	—	8.80	HHDT,MHDT
Grading	Hauling	25.0	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	24.8	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	11.1	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	—	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT

Architectural Coating	—	—	—	—
Architectural Coating	Worker	4.97	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	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	101,418	33,806	6,417

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)
Grading	2,500	500	10.0	0.00	—
Paving	0.00	0.00	0.00	0.00	2.46

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Unrefrigerated Warehouse-No Rail	0.00	0%

General Office Building	0.00	0%
Parking Lot	2.39	100%
Other Asphalt Surfaces	0.06	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	375	0.01	< 0.005
2027	0.00	375	0.01	< 0.005

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
Unrefrigerated Warehouse-No Rail	54.6	54.6	54.6	19,914	441	441	441	160,995
General Office Building	387	387	387	141,278	3,129	3,129	3,129	1,142,193
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	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	101,418	33,806	6,417

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

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	269,221	375	0.0129	0.0017	105,316
General Office Building	822,132	375	0.0129	0.0017	1,187,957
Parking Lot	91,296	375	0.0129	0.0017	0.00
Other Asphalt Surfaces	0.00	375	0.0129	0.0017	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	7,378,031	969,418
General Office Building	6,346,339	0.00
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	30.0	—
General Office Building	33.2	—
Parking Lot	0.00	—
Other Asphalt Surfaces	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
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

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
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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
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5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
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5.17. User Defined

Equipment Type	Fuel Type
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5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	18.8	annual days of extreme heat
Extreme Precipitation	6.20	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	47.0
AQ-PM	37.6
AQ-DPM	84.3
Drinking Water	55.7
Lead Risk Housing	7.11

Pesticides	39.5
Toxic Releases	44.3
Traffic	85.3
Effect Indicators	—
CleanUp Sites	89.0
Groundwater	93.4
Haz Waste Facilities/Generators	97.9
Impaired Water Bodies	66.7
Solid Waste	99.9
Sensitive Population	—
Asthma	87.5
Cardio-vascular	71.3
Low Birth Weights	65.8
Socioeconomic Factor Indicators	—
Education	51.0
Housing	71.6
Linguistic	13.3
Poverty	77.2
Unemployment	81.0

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	11.98511485
Employed	6.159373797
Median HI	3.977928911
Education	—

Bachelor's or higher	37.80315668
High school enrollment	100
Preschool enrollment	7.134607982
Transportation	—
Auto Access	11.81829847
Active commuting	89.83703323
Social	—
2-parent households	1.373027076
Voting	30.29641986
Neighborhood	—
Alcohol availability	24.17554215
Park access	61.26010522
Retail density	52.17502887
Supermarket access	23.08481971
Tree canopy	84.10111639
Housing	—
Homeownership	17.95200821
Housing habitability	23.97022969
Low-inc homeowner severe housing cost burden	47.02938535
Low-inc renter severe housing cost burden	4.208905428
Uncrowded housing	40.20274605
Health Outcomes	—
Insured adults	44.48864365
Arthritis	45.8
Asthma ER Admissions	26.3
High Blood Pressure	46.3
Cancer (excluding skin)	45.0
Asthma	8.7

Coronary Heart Disease	34.0
Chronic Obstructive Pulmonary Disease	16.6
Diagnosed Diabetes	68.9
Life Expectancy at Birth	35.4
Cognitively Disabled	25.4
Physically Disabled	5.0
Heart Attack ER Admissions	24.2
Mental Health Not Good	22.6
Chronic Kidney Disease	55.3
Obesity	38.6
Pedestrian Injuries	19.6
Physical Health Not Good	37.1
Stroke	26.0
Health Risk Behaviors	—
Binge Drinking	48.9
Current Smoker	15.0
No Leisure Time for Physical Activity	43.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	61.0
Elderly	26.8
English Speaking	50.5
Foreign-born	5.9
Outdoor Workers	68.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	17.1
Traffic Density	81.6

Traffic Access	68.0
Other Indices	—
Hardship	76.4
Other Decision Support	—
2016 Voting	27.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	91.0
Healthy Places Index Score for Project Location (b)	10.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	See Project Description. 5.75 Lot Acreage. 69,411 SF pervious area included as Landscaped area (from Drainage Study).
Construction: Construction Phases	11-month construction duration beginning in February 2026.

Operations: Vehicle Data	Project would generate 442 new vehicle trips per day.
Construction: Dust From Material Movement	67,612 SF building * 1-foot grading depth = 2,500 CY of estimated import. 500 CY of export estimated.
Operations: Water and Waste Water	All landscaped area included under Unrefrigerated Warehouse-No Rail Land Use.

APPENDIX B

HRA Construction Worksheets



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  LOCATION 002 POINT   638122.4  4267392  11.93
  LOCATION 003 LINE    638229.5  4267409  638127.2  4267351  9.8
  LOCATION 004 LINE    638229.5  4267409  638127.2  4267351  9.8
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  SRCPARAM 002 1 3.84 366  50  0.1
  SRCPARAM 003 0.00304 3.66 2.8 3.66
  SRCPARAM 004 0.00304 0 2.8 3.66
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Opportunity Industrial\HARP\14-18.PFL"
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ME UAIRDATA  23230 2014
ME SITEDATA  0 2014
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PROJECT\plt\PERIOD004.PLT" 38

OU FINISHED

*** Message Summary For AERMOD Model Setup ***

----- Summary of Total Messages -----

A Total of	0 Fatal Error Message(s)
A Total of	3 Warning Message(s)
A Total of	0 Informational Message(s)

***** FATAL ERROR MESSAGES *****

*** NONE ***

***** WARNING MESSAGES *****

CO W200	6	TITLES: Missing Parameter(s). No Options Specified For TITLETWO
ME W186	45	MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used 0.50
ME W187	45	MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

*** SETUP Finishes Successfully ***

▲ *** AERMOD - VERSION 21112 *** *** Ramona Industrial
*** 05/16/25
*** AERMET - VERSION 19191 *** ***
*** 16:14:59

PAGE 1
*** MODELOPTs: RegDEFAULT CONC ELEV RURAL ADJ_U*

*** MODEL SETUP OPTIONS SUMMARY

-- --
**Model Is Setup For Calculation of Average CONCentration Values.

-- DEPOSITION LOGIC --
**NO GAS DEPOSITION Data Provided.
**NO PARTICLE DEPOSITION Data Provided.
**Model Uses NO DRY DEPLETION. DRYDPLT = F
**Model Uses NO WET DEPLETION. WETDPLT = F

**Model Uses RURAL Dispersion Only.

**Model Uses Regulatory DEFAULT Options:
1. Stack-tip Downwash.
2. Model Accounts for ELEVated Terrain Effects.
3. Use Calms Processing Routine.
4. Use Missing Data Processing Routine.
5. No Exponential Decay.

**Other Options Specified:
ADJ_U* - Use ADJ_U* option for SBL in AERMET
CCVR_Sub - Meteorological data includes CCVR substitutions
TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: OTHER

**Model Calculates 1 Short Term Average(s) of: 1-HR
and Calculates PERIOD Averages

**This Run Includes: 4 Source(s); 4 Source Group(s); and 25
Receptor(s)

with: 1 POINT(s), including

0 POINTCAP(s) and 0 POINTHOR(s)
and: 1 VOLUME source(s)
and: 0 AREA type source(s)
and: 2 LINE source(s)
and: 0 RLINE/RLINEXT source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with a total of 0 line(s)

**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date: 19191

**Output Options Selected:

Model Outputs Tables of PERIOD Averages by Receptor

Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)

Model Outputs External File(s) of High Values for Plotting (PLOTFILE
Keyword)

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
m for Missing Hours
b for Both Calm and

Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 7.20 ; Decay
Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/SEC ;
Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.5 MB of RAM.

**Input Runstream File: aermod.inp

**Output Print File: aermod.out

**Detailed Error/Message File: D:\Extra HDD Files\JK Consulting Group Project
Files\2025-003 Ramona Opportunity Industrial\HARP

▲ *** AERMOD - VERSION 21112 *** *** Ramona Industrial

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*** AERMET - VERSION 19191 *** ***

*** 16:14:59

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*** MODELOPTs: RegDFault CONC ELEV RURAL ADJ_U*

*** POINT SOURCE DATA ***

STACK	STACK	BLDG	URBAN	CAP/	EMIS	RATE	BASE	STACK	STACK
SOURCE	PART.	(GRAMS/SEC)	X	Y	ELEV.	HEIGHT	TEMP.	EXIT	
VEL.	DIAMETER	EXISTS	SOURCE	HOR	SCALAR	(METERS)	(METERS)	(DEG.K)	
ID	CATS.				(METERS)	(METERS)	(METERS)	(METERS)	
(M/SEC)	(METERS)				VARY BY				

```

002          0  0.10000E+01  638122.4  4267392.0   11.9    3.84   366.00
50.00    0.10    NO      NO      NO
^ *** AERMOD - VERSION 21112 ***   ***   Ramona Industrial
      ***   05/16/25
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      ***   16:14:59

```

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*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** VOLUME SOURCE DATA ***

INIT.	URBAN	NUMBER	EMISSION	RATE	BASE	RELEASE	INIT.
SOURCE	PART.	(GRAMS/SEC)	X	Y	ELEV.	HEIGHT	SY
SZ	SOURCE	SCALAR	VARY		(METERS)	(METERS)	(METERS)
ID	CATS.				(METERS)	(METERS)	(METERS)
(METERS)		BY					

```

001          0  0.10000E+01  638121.6  4267402.0   11.9    3.05    8.45
6.10    NO
^ *** AERMOD - VERSION 21112 ***   ***   Ramona Industrial
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*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** LINE SOURCE DATA ***

RELEASE	WIDTH	INIT.	URBAN	EMISSION	RATE	FIRST	COORD	SECOND	COORD	BASE
SOURCE	PART.	(GRAMS/SEC)	X	Y	X	Y	ELEV.			
HEIGHT	OF LINE	SZ	SOURCE	SCALAR	VARY					
ID	CATS.	/METER**2)	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)			

(METERS) (METERS) (METERS) BY

003 0 0.30400E-02 638229.5 4267409.0 638127.2 4267351.0 9.8
3.66 2.80 3.66 NO
004 0 0.30400E-02 638229.5 4267409.0 638127.2 4267351.0 9.8
0.00 2.80 3.66 NO
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*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID SOURCE IDs

001 001 ,
002 002 ,
003 003 ,
004 004 ,
▲ *** AERMOD - VERSION 21112 *** *** Ramona Industrial
*** 05/16/25
*** AERMET - VERSION 19191 *** ***
*** 16:14:59

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*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(637921.7, 4267468.0, 12.2, 12.2, 0.0); (638181.6,
4267462.0, 11.7, 11.7, 0.0);
(638189.6, 4267436.0, 11.1, 11.1, 0.0); (638208.0,
4267422.0, 10.4, 10.4, 0.0);
(637779.4, 4267667.0, 12.2, 12.2, 0.0); (638408.6,
4267327.0, 8.9, 8.9, 0.0);
(638031.1, 4267388.0, 12.1, 12.1, 0.0); (638056.4,
4267345.0, 12.1, 12.1, 0.0);

*** MODELOPTs: RegDFault CONC ELEV RURAL ADJ U*

Surface station no.: 23232
Name: UNKNOWN

Upper air station no.: 23230
Name: UNKNOWN

Year: 2014

Year: 2014

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN
ALBEDO	REF	WS	WD	HT	REF	TA	HT							
14	01	01	1	01	-1.4	0.061	-9.000	-9.000	-999.	36.	14.2	0.04	0.93	
1.00	0.62	152.		10.1	274.9	2.0								
14	01	01	1	02	-4.9	0.096	-9.000	-9.000	-999.	72.	16.7	0.16	0.93	
1.00	1.08	107.		10.1	274.2	2.0								
14	01	01	1	03	-5.3	0.100	-9.000	-9.000	-999.	76.	17.3	0.16	0.93	
1.00	1.13	95.		10.1	274.2	2.0								
14	01	01	1	04	-2.4	0.075	-9.000	-9.000	-999.	49.	15.4	0.16	0.93	
1.00	0.70	117.		10.1	273.8	2.0								
14	01	01	1	05	-3.8	0.084	-9.000	-9.000	-999.	59.	14.5	0.11	0.93	
1.00	1.03	120.		10.1	273.1	2.0								
14	01	01	1	06	-2.3	0.072	-9.000	-9.000	-999.	46.	14.5	0.11	0.93	
1.00	0.74	128.		10.1	273.1	2.0								
14	01	01	1	07	-1.3	0.061	-9.000	-9.000	-999.	36.	16.0	0.05	0.93	
1.00	0.53	232.		10.1	273.1	2.0								
14	01	01	1	08	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.08	0.93	
0.76	0.00	0.		10.1	273.1	2.0								
14	01	01	1	09	-1.5	0.085	-9.000	-9.000	-999.	60.	38.3	0.11	0.93	
0.40	1.03	133.		10.1	278.1	2.0								
14	01	01	1	10	40.2	0.170	0.461	0.019	88.	168.	-11.2	0.11	0.93	
0.28	1.50	122.		10.1	281.4	2.0								
14	01	01	1	11	74.7	0.195	0.704	0.017	170.	206.	-9.0	0.11	0.93	
0.23	1.67	140.		10.1	283.8	2.0								
14	01	01	1	12	94.4	0.181	0.832	0.016	222.	184.	-5.7	0.04	0.93	
0.22	1.88	157.		10.1	286.4	2.0								
14	01	01	1	13	97.3	0.170	0.891	0.014	265.	168.	-4.6	0.04	0.93	
0.22	1.71	173.		10.1	287.5	2.0								
14	01	01	1	14	84.1	0.178	0.894	0.013	309.	181.	-6.1	0.04	0.93	
0.23	1.81	202.		10.1	289.2	2.0								
14	01	01	1	15	54.8	0.119	0.824	0.012	371.	99.	-2.8	0.04	0.93	
0.26	1.08	189.		10.1	289.9	2.0								
14	01	01	1	16	12.2	0.060	0.506	0.012	384.	36.	-1.6	0.04	0.93	
0.35	0.52	169.		10.1	288.8	2.0								
14	01	01	1	17	-2.3	0.067	-9.000	-9.000	-999.	42.	11.9	0.04	0.93	
0.60	0.96	173.		10.1	286.4	2.0								
14	01	01	1	18	-1.7	0.066	-9.000	-9.000	-999.	40.	15.2	0.09	0.93	
1.00	0.62	252.		10.1	283.8	2.0								
14	01	01	1	19	-1.7	0.069	-9.000	-9.000	-999.	43.	17.0	0.15	0.93	
1.00	0.55	79.		10.1	281.4	2.0								
14	01	01	1	20	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.08	0.93	

1.00	0.00	0.	10.1	280.4	2.0
14 01 01	1 21	-1.7	0.062	-9.000	-9.000 -999. 37. 13.4 0.04 0.93
1.00	0.69	7.	10.1	279.2	2.0
14 01 01	1 22	-999.0	-9.000	-9.000 -999. -999. -99999.0	0.08 0.93
1.00	0.00	0.	10.1	278.1	2.0
14 01 01	1 23	-1.3	0.060	-9.000	-9.000 -999. 35. 14.8 0.04 0.93
1.00	0.58	28.	10.1	277.5	2.0
14 01 01	1 24	-2.2	0.067	-9.000	-9.000 -999. 42. 12.2 0.04 0.93
1.00	0.87	24.	10.1	277.5	2.0

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
14	01	01	01	10.1	1	152.	0.62	274.9	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

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 *** 05/16/25
 *** AERMET - VERSION 19191 *** ***
 *** 16:14:59

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*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** THE PERIOD (43680 HRS) AVERAGE CONCENTRATION

VALUES FOR SOURCE GROUP: 001

INCLUDING SOURCE(S): 001 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF OTHER IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
637921.70	4267468.00	19.05788	638181.60
4267462.00	135.48934		
638189.60	4267436.00	107.04056	638208.00
4267422.00	71.99848		
637779.40	4267667.00	8.98708	638408.60
4267327.00	11.67961		
638031.10	4267388.00	52.74311	638056.40
4267345.00	55.92179		
638081.60	4267301.00	49.10062	638106.90
4267258.00	35.91540		
638111.50	4267250.00	33.59912	638146.10
4267272.00	45.36092		

638188.40	4267299.00	63.99858	638230.70
4267326.00	47.56276		
638268.40	4267349.00	31.77296	638265.50
4267354.00	32.91789		
638238.40	4267396.00	46.78791	638227.20
4267413.00	53.66683		
638201.10	4267400.00	83.47969	638186.00
4267392.00	114.12172		
638168.00	4267419.00	183.84702	638163.50
4267426.00	221.24688		
638123.20	4267415.00	0.00000	638107.60
4267410.00	0.00000		
638075.20	4267401.00	151.55610	

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 *** 16:14:59

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*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** THE PERIOD (43680 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: 002 INCLUDING SOURCE(S): 002 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF OTHER IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
637921.70	4267468.00	6.23891	638181.60
4267462.00	48.81709		
638189.60	4267436.00	24.51706	638208.00
4267422.00	11.39728		
637779.40	4267667.00	5.64338	638408.60
4267327.00	3.46449		
638031.10	4267388.00	6.54408	638056.40
4267345.00	6.08414		
638081.60	4267301.00	5.83404	638106.90
4267258.00	5.90889		
638111.50	4267250.00	5.94999	638146.10
4267272.00	11.98683		
638188.40	4267299.00	20.13616	638230.70
4267326.00	10.14805		

638268.40	4267349.00	6.09262	638265.50
4267354.00	6.11112		
638238.40	4267396.00	6.84375	638227.20
4267413.00	7.98094		
638201.10	4267400.00	10.15083	638186.00
4267392.00	11.61863		
638168.00	4267419.00	26.62722	638163.50
4267426.00	43.35558		
638123.20	4267415.00	9.39671	638107.60
4267410.00	11.81796		
638075.20	4267401.00	11.21771	

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*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** THE PERIOD (43680 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: 003 INCLUDING SOURCE(S): 003 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF OTHER IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
637921.70	4267468.00	13.75771	638181.60
4267462.00	250.84126		
638189.60	4267436.00	389.92495	638208.00
4267422.00	561.49603		
637779.40	4267667.00	7.53085	638408.60
4267327.00	17.58211		
638031.10	4267388.00	31.74819	638056.40
4267345.00	33.36132		
638081.60	4267301.00	32.53635	638106.90
4267258.00	31.93656		
638111.50	4267250.00	31.09440	638146.10
4267272.00	51.67149		
638188.40	4267299.00	98.10058	638230.70
4267326.00	112.53810		
638268.40	4267349.00	83.31749	638265.50
4267354.00	89.46150		

638238.40	4267396.00	230.02526	638227.20
4267413.00	730.37413		
638201.10	4267400.00	896.38188	638186.00
4267392.00	884.55234		
638168.00	4267419.00	421.30240	638163.50
4267426.00	360.37218		
638123.20	4267415.00	217.21591	638107.60
4267410.00	155.60961		
638075.20	4267401.00	70.86319	

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*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** THE PERIOD (43680 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: 004 INCLUDING SOURCE(S): 004 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF OTHER IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
Y-COORD (M)	CONC		
637921.70	4267468.00	13.33668	638181.60
4267462.00	288.08428		
638189.60	4267436.00	479.40195	638208.00
4267422.00	758.29073		
637779.40	4267667.00	7.32309	638408.60
4267327.00	17.71510		
638031.10	4267388.00	31.68506	638056.40
4267345.00	34.89730		
638081.60	4267301.00	33.30732	638106.90
4267258.00	34.06437		
638111.50	4267250.00	33.02389	638146.10
4267272.00	57.45444		
638188.40	4267299.00	115.24549	638230.70
4267326.00	132.53123		
638268.40	4267349.00	96.71531	638265.50
4267354.00	104.88013		
638238.40	4267396.00	313.81817	638227.20
4267413.00	1095.54605		

638201.10	4267400.00	1358.83090	638186.00
4267392.00	1335.06233		
638168.00	4267419.00	525.26514	638163.50
4267426.00	436.84648		
638123.20	4267415.00	253.70833	638107.60
4267410.00	177.24839		
638075.20	4267401.00	74.79118	

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*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: 001 ***
 INCLUDING SOURCE(S): 001 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF OTHER IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		

637921.70	4267468.00	775.07461	(14120423)	638181.60
4267462.00	2839.19339	(15012109)		
638189.60	4267436.00	2868.87920	(15010222)	638208.00
4267422.00	2383.40100	(14122818)		
637779.40	4267667.00	379.19793	(16021103)	638408.60
4267327.00	647.87830	(16020120)		
638031.10	4267388.00	2073.41852	(17011203)	638056.40
4267345.00	2614.65353	(17120208)		
638081.60	4267301.00	2412.85444	(14051306)	638106.90
4267258.00	1839.16060	(15122709)		
638111.50	4267250.00	1751.04132	(14022408)	638146.10
4267272.00	1693.70690	(15020221)		
638188.40	4267299.00	1752.54627	(18120921)	638230.70
4267326.00	1608.02590	(17012521)		
638268.40	4267349.00	1288.73202	(16020523)	638265.50
4267354.00	1327.27620	(15020218)		
638238.40	4267396.00	1794.72822	(17120123)	638227.20
4267413.00	2020.03537	(18021208)		
638201.10	4267400.00	2613.74895	(15121922)	638186.00
4267392.00	3077.49990	(16122205)		

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
637921.70	4267468.00	282.77156	(15102117)	638181.60
4267462.00	634.42068	(17090321)		
638189.60	4267436.00	680.17729	(18052719)	638208.00
4267422.00	518.78477	(16030223)		
637779.40	4267667.00	192.81672	(14021107)	638408.60
4267327.00	230.57025	(17031418)		
638031.10	4267388.00	548.28327	(18010317)	638056.40
4267345.00	659.72787	(16021502)		
638081.60	4267301.00	580.02902	(14020220)	638106.90
4267258.00	442.10915	(16032819)		
638111.50	4267250.00	436.54533	(16043022)	638146.10
4267272.00	432.52400	(18060119)		
638188.40	4267299.00	448.67150	(18091918)	638230.70
4267326.00	398.83100	(17061720)		
638268.40	4267349.00	320.87743	(17050221)	638265.50
4267354.00	323.10935	(17050221)		
638238.40	4267396.00	419.35675	(17061706)	638227.20
4267413.00	451.15151	(14013009)		
638201.10	4267400.00	610.11645	(16051019)	638186.00
4267392.00	696.41987	(15031718)		
638168.00	4267419.00	870.94586	(16102317)	638163.50
4267426.00	899.26550	(14091818)		

638123.20 4267415.00 497.29325 (18082619) 638107.60
4267410.00 1025.12622 (18112819)
638075.20 4267401.00 930.63435 (17021702)

▲ *** AERMOD - VERSION 21112 *** *** Ramona Industrial
*** 05/16/25
*** AERMET - VERSION 19191 *** ***
*** 16:14:59

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*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: 003 ***
INCLUDING SOURCE(S): 003 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF OTHER IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
637921.70	4267468.00	902.76134	(17040907)	638181.60
4267462.00	3127.55392	(16040607)		
638189.60	4267436.00	4233.30230	(14091907)	638208.00
4267422.00	5336.63703	(15041007)		
637779.40	4267667.00	547.98958	(14110508)	638408.60
4267327.00	1153.93563	(15020408)		
638031.10	4267388.00	1878.93037	(15011909)	638056.40
4267345.00	3133.51624	(17122909)		
638081.60	4267301.00	4091.28058	(16122409)	638106.90
4267258.00	3433.65874	(14011509)		
638111.50	4267250.00	3308.08716	(14011509)	638146.10
4267272.00	2827.74226	(14011509)		
638188.40	4267299.00	2660.14063	(18092107)	638230.70
4267326.00	3155.78507	(15040907)		
638268.40	4267349.00	2625.94766	(15040807)	638265.50
4267354.00	2666.49979	(15040807)		
638238.40	4267396.00	6857.90329	(14091007)	638227.20
4267413.00	12083.51301	(15030408)		
638201.10	4267400.00	9821.64137	(15030408)	638186.00
4267392.00	8495.35400	(15030408)		
638168.00	4267419.00	3882.53647	(14091907)	638163.50
4267426.00	3348.36022	(16040607)		
638123.20	4267415.00	3368.23779	(14110508)	638107.60
4267410.00	3301.70351	(14110508)		

638075.20 4267401.00 2588.44036 (17040907)

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*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: 004 ***
INCLUDING SOURCE(S): 004 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF OTHER IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
637921.70	4267468.00	1276.54058	(17040907)	638181.60
4267462.00	3856.70311	(14091907)		
638189.60	4267436.00	5372.35796	(15041007)	638208.00
4267422.00	7654.23981	(15091807)		
637779.40	4267667.00	777.88435	(14110508)	638408.60
4267327.00	1625.81208	(15020408)		
638031.10	4267388.00	2517.55875	(14072506)	638056.40
4267345.00	4839.56447	(15010109)		
638081.60	4267301.00	5879.15357	(14010709)	638106.90
4267258.00	4403.12402	(14011509)		
638111.50	4267250.00	4143.36931	(14011509)	638146.10
4267272.00	3778.81493	(14011509)		
638188.40	4267299.00	3155.32237	(18092107)	638230.70
4267326.00	3848.75561	(15040907)		
638268.40	4267349.00	3648.09522	(15040907)	638265.50
4267354.00	3764.23189	(15040907)		
638238.40	4267396.00	11279.59682	(14091007)	638227.20
4267413.00	23819.09290	(15030408)		
638201.10	4267400.00	19458.41695	(15030408)	638186.00
4267392.00	16941.99461	(15030408)		
638168.00	4267419.00	5382.93684	(14091907)	638163.50
4267426.00	4581.37862	(14091907)		
638123.20	4267415.00	3762.10250	(14110508)	638107.60
4267410.00	3638.85683	(14110508)		
638075.20	4267401.00	2988.17778	(17040907)	

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*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** THE SUMMARY OF MAXIMUM PERIOD (43680
 HRS) RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3

**

GROUP ID	NETWORK	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV,
ZHILL, ZFLAG) OF TYPE	GRID-ID		
001	1ST HIGHEST VALUE IS	221.24688 AT (	638163.50, 4267426.00, 11.40,
11.40,	0.00) DC		
	2ND HIGHEST VALUE IS	183.84702 AT (	638168.00, 4267419.00, 11.21,
11.21,	0.00) DC		
	3RD HIGHEST VALUE IS	151.55610 AT (	638075.20, 4267401.00, 12.19,
12.19,	0.00) DC		
	4TH HIGHEST VALUE IS	135.48934 AT (	638181.60, 4267462.00, 11.67,
11.67,	0.00) DC		
	5TH HIGHEST VALUE IS	114.12172 AT (	638186.00, 4267392.00, 10.29,
10.29,	0.00) DC		
	6TH HIGHEST VALUE IS	107.04056 AT (	638189.60, 4267436.00, 11.08,
11.08,	0.00) DC		
	7TH HIGHEST VALUE IS	83.47969 AT (	638201.10, 4267400.00, 10.12,
10.12,	0.00) DC		
	8TH HIGHEST VALUE IS	71.99848 AT (	638208.00, 4267422.00, 10.42,
10.42,	0.00) DC		
	9TH HIGHEST VALUE IS	63.99858 AT (	638188.40, 4267299.00, 8.58,
8.58,	0.00) DC		
	10TH HIGHEST VALUE IS	55.92179 AT (	638056.40, 4267345.00, 12.12,
12.12,	0.00) DC		
002	1ST HIGHEST VALUE IS	48.81709 AT (	638181.60, 4267462.00, 11.67,
11.67,	0.00) DC		
	2ND HIGHEST VALUE IS	43.35558 AT (	638163.50, 4267426.00, 11.40,
11.40,	0.00) DC		
	3RD HIGHEST VALUE IS	26.62722 AT (	638168.00, 4267419.00, 11.21,
11.21,	0.00) DC		
	4TH HIGHEST VALUE IS	24.51706 AT (	638189.60, 4267436.00, 11.08,

11.08,	0.00) DC	20.13616 AT (	638188.40,	4267299.00,	8.58,
8.58,	0.00) DC				
	6TH HIGHEST VALUE IS	11.98683 AT (	638146.10,	4267272.00,	8.80,
11.28,	0.00) DC				
	7TH HIGHEST VALUE IS	11.81796 AT (	638107.60,	4267410.00,	12.05,
12.05,	0.00) DC				
	8TH HIGHEST VALUE IS	11.61863 AT (	638186.00,	4267392.00,	10.29,
10.29,	0.00) DC				
	9TH HIGHEST VALUE IS	11.39728 AT (	638208.00,	4267422.00,	10.42,
10.42,	0.00) DC				
	10TH HIGHEST VALUE IS	11.21771 AT (	638075.20,	4267401.00,	12.19,
12.19,	0.00) DC				
003	1ST HIGHEST VALUE IS	896.38188 AT (	638201.10,	4267400.00,	10.12,
10.12,	0.00) DC				
	2ND HIGHEST VALUE IS	884.55234 AT (	638186.00,	4267392.00,	10.29,
10.29,	0.00) DC				
	3RD HIGHEST VALUE IS	730.37413 AT (	638227.20,	4267413.00,	9.93,
9.93,	0.00) DC				
	4TH HIGHEST VALUE IS	561.49603 AT (	638208.00,	4267422.00,	10.42,
10.42,	0.00) DC				
	5TH HIGHEST VALUE IS	421.30240 AT (	638168.00,	4267419.00,	11.21,
11.21,	0.00) DC				
	6TH HIGHEST VALUE IS	389.92495 AT (	638189.60,	4267436.00,	11.08,
11.08,	0.00) DC				
	7TH HIGHEST VALUE IS	360.37218 AT (	638163.50,	4267426.00,	11.40,
11.40,	0.00) DC				
	8TH HIGHEST VALUE IS	250.84126 AT (	638181.60,	4267462.00,	11.67,
11.67,	0.00) DC				
	9TH HIGHEST VALUE IS	230.02526 AT (	638238.40,	4267396.00,	9.29,
9.29,	0.00) DC				
	10TH HIGHEST VALUE IS	217.21591 AT (	638123.20,	4267415.00,	11.89,
11.89,	0.00) DC				
004	1ST HIGHEST VALUE IS	1358.83090 AT (	638201.10,	4267400.00,	10.12,
10.12,	0.00) DC				
	2ND HIGHEST VALUE IS	1335.06233 AT (	638186.00,	4267392.00,	10.29,
10.29,	0.00) DC				
	3RD HIGHEST VALUE IS	1095.54605 AT (	638227.20,	4267413.00,	9.93,
9.93,	0.00) DC				
	4TH HIGHEST VALUE IS	758.29073 AT (	638208.00,	4267422.00,	10.42,
10.42,	0.00) DC				
	5TH HIGHEST VALUE IS	525.26514 AT (	638168.00,	4267419.00,	11.21,
11.21,	0.00) DC				
	6TH HIGHEST VALUE IS	479.40195 AT (	638189.60,	4267436.00,	11.08,
11.08,	0.00) DC				
	7TH HIGHEST VALUE IS	436.84648 AT (	638163.50,	4267426.00,	11.40,
11.40,	0.00) DC				
	8TH HIGHEST VALUE IS	313.81817 AT (	638238.40,	4267396.00,	9.29,

9.29, 0.00) DC
9TH HIGHEST VALUE IS 288.08428 AT (638181.60, 4267462.00, 11.67,
11.67, 0.00) DC
10TH HIGHEST VALUE IS 253.70833 AT (638123.20, 4267415.00, 11.89,
11.89, 0.00) DC

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

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*** 05/16/25
*** AERMET - VERSION 19191 *** ***
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*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** THE SUMMARY OF HIGHEST 1-HR

RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3

**

GROUP ID				NETWORK	DATE		RECEPTOR
(XR, YR, ZELEV, ZHILL, ZFLAG)				AVERAGE CONC OF TYPE GRID-ID	(YYMMDDHH)		
001	HIGH	1ST HIGH VALUE IS	4186.45587	ON 15010222:	AT (638163.50,		
4267426.00,	11.40,	11.40,	0.00)	DC			
002	HIGH	1ST HIGH VALUE IS	1025.12622	ON 18112819:	AT (638107.60,		
4267410.00,	12.05,	12.05,	0.00)	DC			
003	HIGH	1ST HIGH VALUE IS	12083.51301	ON 15030408:	AT (638227.20,		
4267413.00,	9.93,	9.93,	0.00)	DC			
004	HIGH	1ST HIGH VALUE IS	23819.09290	ON 15030408:	AT (638227.20,		
4267413.00,	9.93,	9.93,	0.00)	DC			

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

▲ *** AERMOD - VERSION 21112 *** *** Ramona Industrial
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*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** Message Summary : AERMOD Model Execution ***

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)
A Total of 3 Warning Message(s)
A Total of 1576 Informational Message(s)

A Total of 43680 Hours Were Processed

A Total of 643 Calm Hours Identified

A Total of 933 Missing Hours Identified (2.14 Percent)

***** FATAL ERROR MESSAGES *****
*** NONE ***

***** WARNING MESSAGES *****
CO W200 6 TITLES: Missing Parameter(s). No Options Specified For
TITLETWO
ME W186 45 MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
0.50
ME W187 45 MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

*** AERMOD Finishes Successfully ***

	GRP	NETID	X	Y	CONC	POLID	POLABBR	RISK_SUM	SCENARIO	DETAILS	INH_RISK	SOIL_RISK	DERMAL_R	PM10L_RIS	WATER_RIS	FISH_RISK	CROP_RIS	RIS	BEEF_RISK	DAIRY_RIS	PIG_RISK	CHICKEN_I	EGG_RISK	1ST_DRIVE	2ND_DRIVER
1	SENSITIV	Little L	637921.7	4267468	0.032003	9901	DieselExhP	5.69E-06	1YrCancer *	5.69E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	SENSITIV	SFR 1	638181.6	4267462	0.234028	9901	DieselExhP	4.16E-05	1YrCancer *	4.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	SENSITIV	SFR 2	638189.6	4267436	0.193077	9901	DieselExhP	3.43E-05	1YrCancer *	3.43E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	SENSITIV	SFR 3	638208	4267422	0.142782	9901	DieselExhP	2.54E-05	1YrCancer *	2.54E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	SENSITIV	Apartment	637779.4	4267667	0.015135	9901	DieselExhP	2.69E-06	1YrCancer *	2.69E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	SENSITIV	School 1	638408.6	4267327	0.019996	9901	DieselExhP	3.56E-06	1YrCancer *	3.56E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	PROPERTY		638031.1	4267388	0.088307	9901	DieselExhP	1.57E-05	1YrCancer *	1.57E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	PROPERTY		638056.4	4267345	0.093622	9901	DieselExhP	1.67E-05	1YrCancer *	1.67E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
9	PROPERTY		638081.6	4267301	0.082336	9901	DieselExhP	1.46E-05	1YrCancer *	1.46E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
10	PROPERTY		638106.9	4267258	0.06057	9901	DieselExhP	1.08E-05	1YrCancer *	1.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
11	PROPERTY		638111.5	4267250	0.056714	9901	DieselExhP	1.01E-05	1YrCancer *	1.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
12	PROPERTY		638146.1	4267272	0.076982	9901	DieselExhP	1.37E-05	1YrCancer *	1.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
13	PROPERTY		638188.4	4267299	0.109692	9901	DieselExhP	1.95E-05	1YrCancer *	1.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+0										

*HARP - HRACalc v22118 10/10/2025 5:14:32 PM - Cancer Risk - Input File: D:\Extra HDD Files\UK Consulting Group Project Files\2025-003 Ramona Opportunity Industrial\HARP\RAMONA INDUSTRIAL PROJECT\hra\Construction10102025HRAInput.hra

[illegible]

REC	GRP	NETID	X	Y	CONC	POLID	POLABBRE' SCENARIO	CV	CNS	IMMUN	KIDNEY	GILV	REPRO/DE' RESP	SKIN	EYE	BONE/TEEI ENDO	BLOOD	ODOR	GENERAL	DETAILS	INH_CONC	SOIL_DOSE	DERMAL_D	MMILK_DO	WATER_DC
1	SENSITIV	Little L	637921.7	4267468	0.032003	9901	DieselExhP NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	6.4005e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	3.2003e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
2	SENSITIV	SFR 1	638181.6	4267462	0.234028	9901	DieselExhP NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	4.6806e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	2.3403e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
3	SENSITIV	SFR 2	638189.6	4267436	0.193077	9901	DieselExhP NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	3.8615e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	1.9308e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
4	SENSITIV	SFR 3	638208	4267422	0.142782	9901	DieselExhP NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	2.8556e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	1.4278e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
5	SENSITIV	Apartment	637779.4	4267667	0.015135	9901	DieselExhP NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	3.027e-03	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	1.5135e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
6	SENSITIV	School 1	638408.6	4267327	0.019996	9901	DieselExhP NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	3.9991e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	1.9996e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
7	PROPERTY		638031.1	4267388	0.088307	9901	DieselExhP NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.7661e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	8.8307e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
8	PROPERTY		638056.4	4267345	0.093622	9901	DieselExhP NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.8724e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	9.3622e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
9	PROPERTY		638081.6	4267301	0.082336	9901	DieselExhP NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.6467e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	8.2336e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
10	PROPERTY		638106.9	4267258	0.06057	9901	DieselExhP NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.2114e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	6.057e-02	0.0e+00	0.0e+00	0.0e+00	0.0e+00
11	PROPERTY		638111.5	4267250	0.056714	9901	DieselExhP NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.1343e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	5.6714e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
12	PROPERTY		638146.1	4267272	0.076982	9901	DieselExhP NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.5396e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	7.6982e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
13	PROPERTY		638188.4	4267299	0.109692	9901	DieselExhP NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	2.1938e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	1.0969e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
14	PROPERTY		638230.7	4267326	0.083197	9901	DieselExhP NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.6639e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	8.3197e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
15	PROPERTY		638268.4	4267349	0.055917	9901	DieselExhP NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.1183e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	5.5917e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
16	PROPERTY		638265.5	4267354	0.058068	9901	DieselExhP NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.1614e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	5.8068e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
17	PROPERTY		638238.4	4267396	0.087022	9901	DieselExhP NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.7404e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	8.7022e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
18	PROPERTY		638227.2	4267413	0.120127	9901	DieselExhP NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	2.4025e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	1.2013e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
19	PROPERTY		638201.1	4267400	0.176526	9901	DieselExhP NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	3.5305e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	1.7653e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
20	PROPERTY		638186	4267392	0.226529	9901	DieselExhP NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	4.5306e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	2.2653e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
21	PROPERTY		638168	4267419	0.3211	9901	DieselExhP NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	6.422e-02	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	3.211e-01	0.0e+00	0.0e+00	0.0e+00	0.0e+00
22	PROPERTY		638163.5	4267426	0.380151	9901	DieselExhP NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	7.603e-02	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	3.8015e-01	0.0e+00	0.0e+00	0.0e+00	0.0e+00
23	PROPERTY		638123.2	4267415	0.009176	9901	DieselExhP NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.8352e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	9.176e-03	0.0e+00	0.0e+00	0.0e+00	0.0e+00
24	PROPERTY		638107.6	4267410	0.006559	9901	DieselExhP NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.3119e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	6.5594e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
25	PROPERTY		638075.2	4267401	0.252912	9901	DieselExhP NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	5.0582e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	2.5291e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
1	SENSITIV	Little L	637921.7	4267468	0.029782	88101	PM25 NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	2.9782e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
2	SENSITIV	SFR 1	638181.6	4267462	0.217367	88101	PM25 NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	2.1737e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
3	SENSITIV	SFR 2	638189.6	4267436	0.178786	88101	PM25 NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	1.7879e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
4	SENSITIV	SFR 3	638208	4267422	0.131274	88101	PM25 NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	1.3127e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
5	SENSITIV	Apartment	637779.4	4267667	0.014083	88101	PM25 NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	1.4083e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
6	SENSITIV	School 1	638408.6	4267327	0.018589	88101	PM25 NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	1.8589e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
7	PROPERTY		638031.1	4267388	0.082189	88101	PM25 NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	8.2189e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
8	PROPERTY		638056.4	4267345	0.087132	88101	PM25 NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	8.7132e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
9	PROPERTY		638081.6	4267301	0.076623	88101	PM25 NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	7.6623e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
10	PROPERTY		638106.9	4267258	0.056347	88101	PM25 NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	5.6347e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
11	PROPERTY		638111.5	4267250	0.052758	88101	PM25 NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	5.2758e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
12	PROPERTY		638146.1	4267272	0.071583	88101	PM25 NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	7.1583e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
13	PROPERTY		638188.4	4267299	0.101923	88101	PM25 NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	1.0192e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
14	PROPERTY		638230.7	4267326	0.077207	88101	PM25 NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	7.7207e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
15	PROPERTY		638268.4	4267349	0.051875	88101	PM25 NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	5.1875e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00
16	PROPERTY		638265.5	4267354	0.05386	88101	PM25 NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	*	5.386e-02	0.0e+00	0.0e+00	0.0e+00	0.0e+00

[illegible][illegible]

*HARP - HRACalc v22118 10/10/2025 5:15:36 PM - Chronic Risk - Input File: D:\Extra HDD Files\JK Consulting Group Project Files\2025-003 Ramona Opportunity Industrial\HARP\RAMONA INDUSTRIAL PROJECT\hra\ConstructionChronic10102025HRAInput.hra

REC	GRP	NETID	X	Y	SCENARIO	CV	CNS	IMMUN	KIDNEY	GILV	REPRO/DE	RESP	SKIN	EYE	BONE/TEET	ENDO	BLOOD	ODOR	GENERAL	MAXHI
1	SENSITIV	Little L	637921.7	4267468	NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	6.4005e-03	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	6.4005e-03
2	SENSITIV	SFR 1	638181.6	4267462	NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	4.6806e-02	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	4.6806e-02
3	SENSITIV	SFR 2	638189.6	4267436	NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	3.8615e-02	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	3.8615e-02
4	SENSITIV	SFR 3	638208	4267422	NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	2.8556e-02	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	2.8556e-02
5	SENSITIV	Apartmen	637779.4	4267667	NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	3.027e-03	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	3.027e-03
6	SENSITIV	School 1	638408.6	4267327	NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	3.9991e-03	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	3.9991e-03
7	PROPERTY		638031.1	4267388	NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.7661e-02	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.7661e-02
8	PROPERTY		638056.4	4267345	NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.8724e-02	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.8724e-02
9	PROPERTY		638081.6	4267301	NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.6467e-02	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.6467e-02
10	PROPERTY		638106.9	4267258	NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.2114e-02	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.2114e-02
11	PROPERTY		638111.5	4267250	NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.1343e-02	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.1343e-02
12	PROPERTY		638146.1	4267272	NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.5396e-02	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.5396e-02
13	PROPERTY		638188.4	4267299	NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	2.1938e-02	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	2.1938e-02
14	PROPERTY		638230.7	4267326	NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.6639e-02	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.6639e-02
15	PROPERTY		638268.4	4267349	NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.1183e-02	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.1183e-02
16	PROPERTY		638265.5	4267354	NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.1614e-02	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.1614e-02
17	PROPERTY		638238.4	4267396	NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.7404e-02	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.7404e-02
18	PROPERTY		638227.2	4267413	NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	2.4025e-02	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	2.4025e-02
19	PROPERTY		638201.1	4267400	NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	3.5305e-02	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	3.5305e-02
20	PROPERTY		638186	4267392	NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	4.5306e-02	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	4.5306e-02
21	PROPERTY		638168	4267419	NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	6.422e-02	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	6.422e-02
22	PROPERTY		638163.5	4267426	NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	7.603e-02	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	7.603e-02
23	PROPERTY		638123.2	4267415	NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.8352e-03	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.8352e-03
24	PROPERTY		638107.6	4267410	NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.3119e-03	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.3119e-03
25	PROPERTY		638075.2	4267401	NonCancer	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	5.0582e-02	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	5.0582e-02

*HARP - HRACalc v22118 10/10/2025 6:33:42 PM - Cancer Risk - Input File: D:\Extra HDD Files\JK Consulting Group Project Files\2025-003 Ramona Opportunity Industrial\HARP\RAMONA INDUSTRIAL PROJECT\hra\ConstructionMitigation10102025HRAInput.hra

[illegible]

APPENDIX C

HRA Operations Worksheets



**AERMOD INPUT FILE CREATED BY HARP VERSION 22118

**DATE CREATED: 5/16/2025 5:49:30 PM

**

CO STARTING

TITLEONE Ramona Industrial Operations

TITLETWO

MODELOPT DFAULT CONC

AVERTIME 1 PERIOD

POLLUTID OTHER

RUNORNOT RUN

ERRORFIL "D:\Extra HDD Files\JK Consulting Group Project Files\2025-003 Ramona Opportunity Industrial\HARP\Operations\Ramona Industrial Operations\Ramona Industrial Operations_AERMOD.ERR"

CO FINISHED

**

**SOURCES

SO STARTING

**SOURCES LOCATIONS

LOCATION 001 POINT 638122.4 4267392 11.93

LOCATION 002 LINE 638229.5 4267409 638127.2 4267351 9.8

**SOURCES PARAMETERS

SRCPARAM 001 1 3.84 366 50 0.1

SRCPARAM 002 0.00304 3.66 2.8 3.66

SO BUILDHGT 001	11.28	11.28	0.00	0.00	0.00	0.00
SO BUILDHGT 001	0.00	0.00	0.00	0.00	11.28	11.28
SO BUILDHGT 001	11.28	0.00	0.00	0.00	0.00	11.28
SO BUILDHGT 001	11.28	11.28	0.00	0.00	0.00	0.00
SO BUILDHGT 001	0.00	0.00	0.00	0.00	11.28	11.28
SO BUILDHGT 001	11.28	11.28	11.28	11.28	11.28	11.28
SO BUILDWID 001	135.21	125.80	0.00	0.00	0.00	0.00
SO BUILDWID 001	0.00	0.00	0.00	0.00	102.69	114.64
SO BUILDWID 001	123.10	0.00	0.00	0.00	0.00	140.50
SO BUILDWID 001	135.21	125.80	0.00	0.00	0.00	0.00
SO BUILDWID 001	0.00	0.00	0.00	0.00	102.69	114.64
SO BUILDWID 001	123.10	127.82	130.78	138.25	141.53	140.50
SO BUILDLEN 001	88.13	102.69	0.00	0.00	0.00	0.00
SO BUILDLEN 001	0.00	0.00	0.00	0.00	125.80	112.58
SO BUILDLEN 001	95.93	0.00	0.00	0.00	0.00	79.60
SO BUILDLEN 001	88.13	102.69	0.00	0.00	0.00	0.00
SO BUILDLEN 001	0.00	0.00	0.00	0.00	125.80	112.58
SO BUILDLEN 001	95.93	76.37	55.98	62.85	68.65	79.60
SO XBADJ 001	-96.02	-92.63	0.00	0.00	0.00	0.00
SO XBADJ 001	0.00	0.00	0.00	0.00	-4.33	7.43
SO XBADJ 001	18.96	0.00	0.00	0.00	0.00	16.90
SO XBADJ 001	7.89	-10.06	0.00	0.00	0.00	0.00
SO XBADJ 001	0.00	0.00	0.00	0.00	-121.47	-120.01
SO XBADJ 001	-114.89	-106.29	-95.81	-95.96	-94.04	-96.50
SO YBADJ 001	-51.65	-58.57	0.00	0.00	0.00	0.00
SO YBADJ 001	0.00	0.00	0.00	0.00	-41.28	-29.10
SO YBADJ 001	-16.04	0.00	0.00	0.00	0.00	43.15

SO YBADJ	001	51.65	58.57	0.00	0.00	0.00	0.00
SO YBADJ	001	0.00	0.00	0.00	0.00	41.28	29.10
SO YBADJ	001	16.04	2.49	-11.02	-22.52	-33.34	-43.15

SRCGROUP 001 001

SRCGROUP 002 002

SO FINISHED

**

**RECEPTORS

RE STARTING

INCLUDED "D:\Extra HDD Files\JK Consulting Group Project Files\2025-003 Ramona Opportunity Industrial\HARP\Operations\Ramona Industrial Operations\Ramona Industrial Operations_AERMAP.REC"

RE FINISHED

**

**MET PATHWAY

ME STARTING

ME SURFFILE "D:\Extra HDD Files\JK Consulting Group Project Files\2025-003 Ramona Opportunity Industrial\HARP\14-18.SFC"

ME PROFFILE "D:\Extra HDD Files\JK Consulting Group Project Files\2025-003 Ramona Opportunity Industrial\HARP\14-18.PFL"

ME SURFDATA 23232 2014

ME UAIRDATA 23230 2014

ME SITEDATA 0 2014

ME PROFBASE 7.2

ME FINISHED

**

**OUTPUT PATHWAY

OU STARTING

RECTABLE ALLAVE 1ST

RECTABLE 1 1ST

PLOTFILE 1 001 1ST "D:\Extra HDD Files\JK Consulting Group Project Files\2025-003 Ramona Opportunity Industrial\HARP\Operations\Ramona Industrial Operations\plt\MAX1HR001.PLT" 31

PLOTFILE 1 002 1ST "D:\Extra HDD Files\JK Consulting Group Project Files\2025-003 Ramona Opportunity Industrial\HARP\Operations\Ramona Industrial Operations\plt\MAX1HR002.PLT" 32

PLOTFILE PERIOD 001 "D:\Extra HDD Files\JK Consulting Group Project Files\2025-003 Ramona Opportunity Industrial\HARP\Operations\Ramona Industrial Operations\plt\PERIOD001.PLT" 33

PLOTFILE PERIOD 002 "D:\Extra HDD Files\JK Consulting Group Project Files\2025-003 Ramona Opportunity Industrial\HARP\Operations\Ramona Industrial Operations\plt\PERIOD002.PLT" 34

OU FINISHED

*** Message Summary For AERMOD Model Setup ***

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)

A Total of 3 Warning Message(s)
A Total of 0 Informational Message(s)

***** FATAL ERROR MESSAGES *****
*** NONE ***

***** WARNING MESSAGES *****
CO W200 6 TITLES: Missing Parameter(s). No Options Specified For
TITLETWO
ME W186 69 MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
0.50
ME W187 69 MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

*** SETUP Finishes Successfully ***

▲ *** AERMOD - VERSION 21112 *** *** Ramona Industrial Operations
*** 05/16/25
*** AERMET - VERSION 19191 *** ***
*** 17:49:36

PAGE 1
*** MODELOPTs: RegDEFAULT CONC ELEV RURAL ADJ_U*

*** MODEL SETUP OPTIONS SUMMARY

-- --
**Model Is Setup For Calculation of Average CONCentration Values.

-- DEPOSITION LOGIC --

**NO GAS DEPOSITION Data Provided.

**NO PARTICLE DEPOSITION Data Provided.

**Model Uses NO DRY DEPLETION. DRYDPLT = F

**Model Uses NO WET DEPLETION. WETDPLT = F

**Model Uses RURAL Dispersion Only.

**Model Uses Regulatory DEFAULT Options:

1. Stack-tip Downwash.
2. Model Accounts for ELEVated Terrain Effects.
3. Use Calms Processing Routine.
4. Use Missing Data Processing Routine.
5. No Exponential Decay.

****Other Options Specified:**

ADJ_U* - Use ADJ_U* option for SBL in AERMET
CCVR_Sub - Meteorological data includes CCVR substitutions
TEMP_Sub - Meteorological data includes TEMP substitutions

****Model Assumes No FLAGPOLE Receptor Heights.**

****The User Specified a Pollutant Type of: OTHER**

****Model Calculates 1 Short Term Average(s) of: 1-HR
and Calculates PERIOD Averages**

****This Run Includes: 2 Source(s); 2 Source Group(s); and 25
Receptor(s)**

with: 1 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 0 VOLUME source(s)
and: 0 AREA type source(s)
and: 1 LINE source(s)
and: 0 RLINE/RLINEXT source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with a total of 0 line(s)

****Model Set To Continue RUNNING After the Setup Testing.**

****The AERMET Input Meteorological Data Version Date: 19191**

****Output Options Selected:**

Model Outputs Tables of PERIOD Averages by Receptor
Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)
Model Outputs External File(s) of High Values for Plotting (PLOTFILE
Keyword)

****NOTE: The Following Flags May Appear Following CONC Values:** c for Calm Hours
m for Missing Hours
b for Both Calm and
Missing Hours

****Misc. Inputs:** Base Elev. for Pot. Temp. Profile (m MSL) = 7.20 ; Decay
Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/SEC ;
Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

****Approximate Storage Requirements of Model = 3.5 MB of RAM.**

****Input Runstream File: aermod.inp**

**Output Print File: aermod.out

**Detailed Error/Message File: D:\Extra HDD Files\JK Consulting Group Project Files\2025-003 Ramona Opportunity Industrial\HARP

▲ *** AERMOD - VERSION 21112 *** *** Ramona Industrial Operations
*** 05/16/25
*** AERMET - VERSION 19191 *** ***
*** 17:49:36

PAGE 2

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** POINT SOURCE DATA ***

STACK	STACK	BLDG	URBAN	CAP/	EMIS	BASE	STACK	STACK	
SOURCE	PART.	(GRAMS/SEC)	X	Y	ELEV.	HEIGHT	TEMP.	EXIT	
VEL. DIAMETER	EXISTS	SOURCE	HOR	SCALAR					
ID	CATS.	(METERS)	(METERS)	(METERS)	(METERS)	(DEG.K)			
(M/SEC)	(METERS)			VARY BY					

001 0 0.10000E+01 638122.4 4267392.0 11.9 3.84 366.00
50.00 0.10 YES NO NO

▲ *** AERMOD - VERSION 21112 *** *** Ramona Industrial Operations
*** 05/16/25
*** AERMET - VERSION 19191 *** ***
*** 17:49:36

PAGE 3

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** LINE SOURCE DATA ***

RELEASE	WIDTH	INIT.	URBAN	EMISSION	FIRST	SECOND	BASE	
SOURCE	PART.	(GRAMS/SEC)	X	Y	X	Y	ELEV.	
HEIGHT	OF LINE	SZ	SOURCE	SCALAR	VARY			
ID	CATS.	/METER**2)	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	
(METERS)	(METERS)	(METERS)		BY				

002 0 0.30400E-02 638229.5 4267409.0 638127.2 4267351.0 9.8
3.66 2.80 3.66 NO

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

SRCGROUP ID	SOURCE IDs
-----	-----

*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

IFV YADJ	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ
1	11.3,	135.2,	88.1,	-96.0,	-51.6,	2	11.3,	125.8,	102.7,	-92.6,
-58.6,										
3	0.0,	0.0,	0.0,	0.0,	0.0,	4	0.0,	0.0,	0.0,	0.0,
0.0,										
5	0.0,	0.0,	0.0,	0.0,	0.0,	6	0.0,	0.0,	0.0,	0.0,
0.0,										
7	0.0,	0.0,	0.0,	0.0,	0.0,	8	0.0,	0.0,	0.0,	0.0,
0.0,										
9	0.0,	0.0,	0.0,	0.0,	0.0,	10	0.0,	0.0,	0.0,	0.0,
0.0,										
11	11.3,	102.7,	125.8,	-4.3,	-41.3,	12	11.3,	114.6,	112.6,	7.4,
-29.1,										
13	11.3,	123.1,	95.9,	19.0,	-16.0,	14	0.0,	0.0,	0.0,	0.0,
0.0,										
15	0.0,	0.0,	0.0,	0.0,	0.0,	16	0.0,	0.0,	0.0,	0.0,
0.0,										
17	0.0,	0.0,	0.0,	0.0,	0.0,	18	11.3,	140.5,	79.6,	16.9,


```

      ( 638201.1, 4267400.0,    10.1,    10.1,    0.0);      ( 638186.0,
4267392.0,    10.3,    10.3,    0.0);
      ( 638168.0, 4267419.0,   11.2,   11.2,    0.0);      ( 638163.5,
4267426.0,   11.4,   11.4,    0.0);
      ( 638123.2, 4267415.0,   11.9,   11.9,    0.0);      ( 638107.6,
4267410.0,   12.1,   12.1,    0.0);
      ( 638075.2, 4267401.0,   12.2,   12.2,    0.0);

```

```

^ *** AERMOD - VERSION 21112 *** *** Ramona Industrial Operations
      ***      05/16/25
*** AERMET - VERSION 19191 *** ***
      ***      17:49:36

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*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** METEOROLOGICAL DAYS SELECTED FOR

PROCESSING ***

(1=YES; 0=NO)

```

      1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
      1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
      1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
      1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
      1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
      1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
      1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
      1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED

CATEGORIES ***

(METERS/SEC)

10.80, 1.54, 3.09, 5.14, 8.23,

```

^ *** AERMOD - VERSION 21112 *** *** Ramona Industrial Operations
      ***      05/16/25
*** AERMET - VERSION 19191 *** ***

```

*** 17:49:36

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*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL

DATA ***

Surface file: D:\Extra HDD Files\JK Consulting Group Project Files\2025-003
Ramona Opportunity Met Version: 19191
Profile file: D:\Extra HDD Files\JK Consulting Group Project Files\2025-003
Ramona Opportunity
Surface format: FREE

Profile format: FREE

Surface station no.: 23232
Name: UNKNOWN

Upper air station no.: 23230
Name: UNKNOWN

Year: 2014

Year: 2014

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN
ALBEDO	REF	WS	WD	HT	REF	TA	HT							
14	01	01	1	01	-1.4	0.061	-9.000	-9.000	-999.	36.	14.2	0.04	0.93	
1.00	0.62	152.			10.1	274.9	2.0							
14	01	01	1	02	-4.9	0.096	-9.000	-9.000	-999.	72.	16.7	0.16	0.93	
1.00	1.08	107.			10.1	274.2	2.0							
14	01	01	1	03	-5.3	0.100	-9.000	-9.000	-999.	76.	17.3	0.16	0.93	
1.00	1.13	95.			10.1	274.2	2.0							
14	01	01	1	04	-2.4	0.075	-9.000	-9.000	-999.	49.	15.4	0.16	0.93	
1.00	0.70	117.			10.1	273.8	2.0							
14	01	01	1	05	-3.8	0.084	-9.000	-9.000	-999.	59.	14.5	0.11	0.93	
1.00	1.03	120.			10.1	273.1	2.0							
14	01	01	1	06	-2.3	0.072	-9.000	-9.000	-999.	46.	14.5	0.11	0.93	
1.00	0.74	128.			10.1	273.1	2.0							
14	01	01	1	07	-1.3	0.061	-9.000	-9.000	-999.	36.	16.0	0.05	0.93	
1.00	0.53	232.			10.1	273.1	2.0							
14	01	01	1	08	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.08	0.93	
0.76	0.00	0.			10.1	273.1	2.0							
14	01	01	1	09	-1.5	0.085	-9.000	-9.000	-999.	60.	38.3	0.11	0.93	
0.40	1.03	133.			10.1	278.1	2.0							
14	01	01	1	10	40.2	0.170	0.461	0.019	88.	168.	-11.2	0.11	0.93	
0.28	1.50	122.			10.1	281.4	2.0							
14	01	01	1	11	74.7	0.195	0.704	0.017	170.	206.	-9.0	0.11	0.93	
0.23	1.67	140.			10.1	283.8	2.0							
14	01	01	1	12	94.4	0.181	0.832	0.016	222.	184.	-5.7	0.04	0.93	
0.22	1.88	157.			10.1	286.4	2.0							

14	01	01	1	13	97.3	0.170	0.891	0.014	265.	168.	-4.6	0.04	0.93
0.22	1.71	173.	10.1	287.5	2.0								
14	01	01	1	14	84.1	0.178	0.894	0.013	309.	181.	-6.1	0.04	0.93
0.23	1.81	202.	10.1	289.2	2.0								
14	01	01	1	15	54.8	0.119	0.824	0.012	371.	99.	-2.8	0.04	0.93
0.26	1.08	189.	10.1	289.9	2.0								
14	01	01	1	16	12.2	0.060	0.506	0.012	384.	36.	-1.6	0.04	0.93
0.35	0.52	169.	10.1	288.8	2.0								
14	01	01	1	17	-2.3	0.067	-9.000	-9.000	-999.	42.	11.9	0.04	0.93
0.60	0.96	173.	10.1	286.4	2.0								
14	01	01	1	18	-1.7	0.066	-9.000	-9.000	-999.	40.	15.2	0.09	0.93
1.00	0.62	252.	10.1	283.8	2.0								
14	01	01	1	19	-1.7	0.069	-9.000	-9.000	-999.	43.	17.0	0.15	0.93
1.00	0.55	79.	10.1	281.4	2.0								
14	01	01	1	20	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.08	0.93
1.00	0.00	0.	10.1	280.4	2.0								
14	01	01	1	21	-1.7	0.062	-9.000	-9.000	-999.	37.	13.4	0.04	0.93
1.00	0.69	7.	10.1	279.2	2.0								
14	01	01	1	22	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.08	0.93
1.00	0.00	0.	10.1	278.1	2.0								
14	01	01	1	23	-1.3	0.060	-9.000	-9.000	-999.	35.	14.8	0.04	0.93
1.00	0.58	28.	10.1	277.5	2.0								
14	01	01	1	24	-2.2	0.067	-9.000	-9.000	-999.	42.	12.2	0.04	0.93
1.00	0.87	24.	10.1	277.5	2.0								

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
14	01	01	01	10.1	1	152.	0.62	274.9	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

^ *** AERMOD - VERSION 21112 *** *** Ramona Industrial Operations
 *** 05/16/25
 *** AERMET - VERSION 19191 *** ***
 *** 17:49:36

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*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** THE PERIOD (43680 HRS) AVERAGE CONCENTRATION

 VALUES FOR SOURCE GROUP: 001 INCLUDING SOURCE(S): 001 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF OTHER IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
-------------	-------------	------	-------------

4267462.00	634.42068	(17090321)		
	638189.60	4267436.00	680.17729	(18052719) 638208.00
4267422.00	518.78477	(16030223)		
	637779.40	4267667.00	476.24935	(14112417) 638408.60
4267327.00	492.78463	(14100301)		
	638031.10	4267388.00	548.28327	(18010317) 638056.40
4267345.00	659.72787	(16021502)		
	638081.60	4267301.00	1229.63711	(15113002) 638106.90
4267258.00	1584.13607	(14110422)		
	638111.50	4267250.00	1254.60554	(14110422) 638146.10
4267272.00	977.45694	(15112820)		
	638188.40	4267299.00	811.95194	(14100302) 638230.70
4267326.00	946.71330	(14102718)		
	638268.40	4267349.00	1009.44202	(14100301) 638265.50
4267354.00	968.81517	(14100301)		
	638238.40	4267396.00	419.35675	(17061706) 638227.20
4267413.00	451.15151	(14013009)		
	638201.10	4267400.00	610.11645	(16051019) 638186.00
4267392.00	696.41987	(15031718)		
	638168.00	4267419.00	870.94586	(16102317) 638163.50
4267426.00	899.26550	(14091818)		
	638123.20	4267415.00	912.53201	(14102512) 638107.60
4267410.00	728.38280	(14022810)		
	638075.20	4267401.00	930.63435	(17021702)

^ *** AERMOD - VERSION 21112 *** *** Ramona Industrial Operations
 *** 05/16/25
 *** AERMET - VERSION 19191 *** ***
 *** 17:49:36

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*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: 002 ***
 INCLUDING SOURCE(S): 002 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS

** CONC OF OTHER IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)
Y-COORD (M)	CONC	(YYMMDDHH)		
637921.70	4267468.00	902.76134	(17040907)	638181.60
4267462.00	3127.55392	(16040607)		
638189.60	4267436.00	4233.30230	(14091907)	638208.00

4267422.00	5336.63703	(15041007)		
	637779.40	4267667.00	547.98958	(14110508) 638408.60
4267327.00	1153.93563	(15020408)		
	638031.10	4267388.00	1878.93037	(15011909) 638056.40
4267345.00	3133.51624	(17122909)		
	638081.60	4267301.00	4091.28058	(16122409) 638106.90
4267258.00	3433.65874	(14011509)		
	638111.50	4267250.00	3308.08716	(14011509) 638146.10
4267272.00	2827.74226	(14011509)		
	638188.40	4267299.00	2660.14063	(18092107) 638230.70
4267326.00	3155.78507	(15040907)		
	638268.40	4267349.00	2625.94766	(15040807) 638265.50
4267354.00	2666.49979	(15040807)		
	638238.40	4267396.00	6857.90329	(14091007) 638227.20
4267413.00	12083.51301	(15030408)		
	638201.10	4267400.00	9821.64137	(15030408) 638186.00
4267392.00	8495.35400	(15030408)		
	638168.00	4267419.00	3882.53647	(14091907) 638163.50
4267426.00	3348.36022	(16040607)		
	638123.20	4267415.00	3368.23779	(14110508) 638107.60
4267410.00	3301.70351	(14110508)		
	638075.20	4267401.00	2588.44036	(17040907)

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*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** THE SUMMARY OF MAXIMUM PERIOD (43680
 HRS) RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3

**

GROUP ID	NETWORK	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV,
ZHILL, ZFLAG) OF TYPE	GRID-ID		
- - - - -			
001	1ST HIGHEST VALUE IS	47.62413 AT (	638181.60, 4267462.00, 11.67,
11.67,	0.00) DC		
	2ND HIGHEST VALUE IS	46.02586 AT (	638163.50, 4267426.00, 11.40,
11.40,	0.00) DC		
	3RD HIGHEST VALUE IS	45.97558 AT (	638123.20, 4267415.00, 11.89,

11.89,	0.00)	DC				
	4TH HIGHEST VALUE IS		32.95134	AT (	638107.60,	4267410.00,
12.05,	0.00)	DC				12.05,
	5TH HIGHEST VALUE IS		27.38167	AT (	638188.40,	4267299.00,
8.58,	0.00)	DC				8.58,
	6TH HIGHEST VALUE IS		26.43910	AT (	638168.00,	4267419.00,
11.21,	0.00)	DC				11.21,
	7TH HIGHEST VALUE IS		23.88821	AT (	638189.60,	4267436.00,
11.08,	0.00)	DC				11.08,
	8TH HIGHEST VALUE IS		22.95803	AT (	638106.90,	4267258.00,
11.85,	0.00)	DC				11.85,
	9TH HIGHEST VALUE IS		22.52488	AT (	638230.70,	4267326.00,
8.29,	0.00)	DC				8.29,
	10TH HIGHEST VALUE IS		18.85573	AT (	638146.10,	4267272.00,
11.28,	0.00)	DC				8.80,
002	1ST HIGHEST VALUE IS		896.38188	AT (	638201.10,	4267400.00,
10.12,	0.00)	DC				10.12,
	2ND HIGHEST VALUE IS		884.55234	AT (	638186.00,	4267392.00,
10.29,	0.00)	DC				10.29,
	3RD HIGHEST VALUE IS		730.37413	AT (	638227.20,	4267413.00,
9.93,	0.00)	DC				9.93,
	4TH HIGHEST VALUE IS		561.49603	AT (	638208.00,	4267422.00,
10.42,	0.00)	DC				10.42,
	5TH HIGHEST VALUE IS		421.30240	AT (	638168.00,	4267419.00,
11.21,	0.00)	DC				11.21,
	6TH HIGHEST VALUE IS		389.92495	AT (	638189.60,	4267436.00,
11.08,	0.00)	DC				11.08,
	7TH HIGHEST VALUE IS		360.37218	AT (	638163.50,	4267426.00,
11.40,	0.00)	DC				11.40,
	8TH HIGHEST VALUE IS		250.84126	AT (	638181.60,	4267462.00,
11.67,	0.00)	DC				11.67,
	9TH HIGHEST VALUE IS		230.02526	AT (	638238.40,	4267396.00,
9.29,	0.00)	DC				9.29,
	10TH HIGHEST VALUE IS		217.21591	AT (	638123.20,	4267415.00,
11.89,	0.00)	DC				11.89,

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR

▲ *** AERMOD - VERSION 21112 *** *** Ramona Industrial Operations
 *** 05/16/25
 *** AERMET - VERSION 19191 *** ***
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*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** THE SUMMARY OF HIGHEST 1-HR

RESULTS ***

*** CONC OF OTHER IN MICROGRAMS/M**3
**

GROUP ID			NETWORK	DATE	
(XR, YR, ZELEV, ZHILL, ZFLAG)	AVERAGE CONC		(YYMMDDHH)		RECEPTOR
	OF TYPE	GRID-ID			
001	HIGH	1ST HIGH VALUE IS	1584.13607	ON 14110422: AT (	638106.90,
4267258.00,	11.85,	11.85,	0.00)	DC	
002	HIGH	1ST HIGH VALUE IS	12083.51301	ON 15030408: AT (	638227.20,
4267413.00,	9.93,	9.93,	0.00)	DC	

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

▲ *** AERMOD - VERSION 21112 *** *** Ramona Industrial Operations
*** 05/16/25
*** AERMET - VERSION 19191 *** ***
*** 17:49:36

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*** MODELOPTs: RegDFAULT CONC ELEV RURAL ADJ_U*

*** Message Summary : AERMOD Model Execution ***

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)
A Total of 3 Warning Message(s)
A Total of 1576 Informational Message(s)

A Total of 43680 Hours Were Processed

A Total of 643 Calm Hours Identified

A Total of 933 Missing Hours Identified (2.14 Percent)

***** FATAL ERROR MESSAGES *****
*** NONE ***

```
***** WARNING MESSAGES *****
CO W200      6      TITLES: Missing Parameter(s). No Options Specified For
TITLETWO
ME W186      69      MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
      0.50
ME W187      69      MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET
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*****
*** AERMOD Finishes Successfully ***
*****
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*HARP - HRACalc v22118 10/10/2025 6:50:35 PM - Cancer Risk - Input File: D:\Extra HDD Files\UK Consulting Group Project Files\2025-003 Ramona Opportunity Industrial\HARP\Operations\Ramona Industrial Operations\hra\ProjectOperations10102025HRAInput.hra

REC	GRP	NETID	X	Y	CONC	POLID	POLABBRE	RISK_SUM	SCENARIO	DETAILS	INH_RISK	SOIL_RISK	DERMAL_R	MLMK_RIS	WATER_RIS	FISH_RISK	CROP_RIS	BEEF_RISK	DAIRY_RIS	PIG_RISK	CHICKEN_I	EGG_RISK	1ST_DRIVE	2ND_DRIVER
1	SENSITIV	Little L	637921.7	4267468	7.565339E-	9901	DieselExhP	7.4583e-05	70YrCance *		7.4583e-05	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
2	SENSITIV	SFR 1	638181.6	4267462	0.000105	9901	DieselExhP	1.0385e-07	70YrCance *		1.0385e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
3	SENSITIV	SFR 2	638189.6	4267436	0.000148	9901	DieselExhP	1.4564e-07	70YrCance *		1.4564e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
4	SENSITIV	SFR 3	638208	4267422	0.000205	9901	DieselExhP	2.0225e-07	70YrCance *		2.0225e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
5	SENSITIV	Apartmen	637779.4	4267667	4.906979E-	9901	DieselExhP	4.9065e-05	70YrCance *		4.9065e-05	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
6	SENSITIV	School 1	638408.6	4267327	7.669515E-	9901	DieselExhP	7.561e-09	70YrCance *		7.561e-09	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
7	PROPERTY		638031.1	4267388	1.349361E-	9901	DieselExhP	1.3303e-05	70YrCance *		1.3303e-05	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
8	PROPERTY		638056.4	4267345	1.397343E-	9901	DieselExhP	1.3776e-05	70YrCance *		1.3776e-05	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
9	PROPERTY		638081.6	4267301	1.619279E-	9901	DieselExhP	1.5964e-05	70YrCance *		1.5964e-05	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
10	PROPERTY		638106.9	4267258	1.881003E-	9901	DieselExhP	1.8544e-05	70YrCance *		1.8544e-05	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
11	PROPERTY		638111.5	4267250	1.708768E-	9901	DieselExhP	1.6846e-05	70YrCance *		1.6846e-05	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
12	PROPERTY		638146.1	4267272	2.459028E-	9901	DieselExhP	2.4242e-05	70YrCance *		2.4242e-05	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
13	PROPERTY		638188.4	4267299	4.399661E-	9901	DieselExhP	4.3374e-05	70YrCance *		4.3374e-05	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
14	PROPERTY		638230.7	4267326	4.763241E-	9901	DieselExhP	4.6958e-05	70YrCance *		4.6958e-05	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
15	PROPERTY		638268.4	4267349	3.426317E-	9901	DieselExhP	3.3778e-05	70YrCance *		3.3778e-05	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
16	PROPERTY		638265.5	4267354	3.613234E-	9901	DieselExhP	3.5621e-05	70YrCance *		3.5621e-05	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
17	PROPERTY		638238.4	4267396	8.497702E-	9901	DieselExhP	8.3774e-05	70YrCance *		8.3774e-05	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
18	PROPERTY		638227.2	4267413	0.000265	9901	DieselExhP	2.611e-07	70YrCance *		2.611e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
19	PROPERTY		638201.1	4267400	0.000325	9901	DieselExhP	3.2076e-07	70YrCance *		3.2076e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
20	PROPERTY		638186	4267392	0.000323	9901	DieselExhP	3.1797e-07	70YrCance *		3.1797e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
21	PROPERTY		638168	4267419	0.00016	9901	DieselExhP	1.5756e-07	70YrCance *		1.5756e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
22	PROPERTY		638163.5	4267426	0.000144	9901	DieselExhP	1.4215e-07	70YrCance *		1.4215e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
23	PROPERTY		638123.2	4267415	9.273634E-	9901	DieselExhP	9.1424e-05	70YrCance *		9.1424e-05	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
24	PROPERTY		638107.6	4267410	6.643954E-	9901	DieselExhP	6.5499e-05	70YrCance *		6.5499e-05	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
25	PROPERTY		638075.2	4267401	2.992759E-	9901	DieselExhP	2.9504e-05	70YrCance *		2.9504e-05	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
1	SENSITIV	Little L	637921.7	4267468	7.237991E-	88101	PM25	0.0e+00	70YrCance *		0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
2	SENSITIV	SFR 1	638181.6	4267462	0.000101	88101	PM25	0.0e+00	70YrCance *		0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
3	SENSITIV	SFR 2	638189.6	4267436	0.000141	88101	PM25	0.0e+00	70YrCance *		0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
4	SENSITIV	SFR 3	638208	4267422	0.000196	88101	PM25	0.0e+00	70YrCance *		0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
5	SENSITIV	Apartmen	637779.4	4267667	4.761633E-	88101	PM25	0.0e+00	70YrCance *		0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
6	SENSITIV	School 1	638408.6	4267327	7.337646E-	88101	PM25	0.0e+00	70YrCance *		0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
7	PROPERTY		638031.1	4267388	1.290973E-	88101	PM25	0.0e+00	70YrCance *		0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
8	PROPERTY		638056.4	4267345	1.336878E-	88101	PM25	0.0e+00	70YrCance *		0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
9	PROPERTY		638081.6	4267301	1.549213E-	88101	PM25	0.0e+00	70YrCance *		0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
10	PROPERTY		638106.9	4267258	1.799614E-	88101	PM25	0.0e+00	70YrCance *		0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
11	PROPERTY		638111.5	4267250	1.63483E-0	88101	PM25	0.0e+00	70YrCance *		0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
12	PROPERTY		638146.1	4267272	2.352625E-	88101	PM25	0.0e+00	70YrCance *		0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
13	PROPERTY		638188.4	4267299	4.209284E-	88101	PM25	0.0e+00	70YrCance *		0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
14	PROPERTY		638230.7	4267326	4.557129E-	88101	PM25	0.0e+00	70YrCance *		0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
15	PROPERTY		638268.4	4267349	3.278054E-	88101	PM25	0.0e+00	70YrCance *		0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
16	PROPERTY		638265.5	4267354	3.456884E-	88101	PM25	0.0e+00	70YrCance *		0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
17	PROPERTY		638238.4	4267396	8.129984E-	88101	PM25	0.0e+00	70YrCance *		0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
18	PROPERTY		638227.2	4267413	0.000253	88101	PM25	0.0e+00	70YrCance *		0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00
19	PROPERTY		638201.1	4267400	0.000311	88101	PM25	0.0e+00	70YrCance *		0.0e+00	0.0e+00												

*HARP - HRACalc v22118 10/10/2025 6:50:35 PM - Cancer Risk - Input File: D:\Extra HDD Files\JK Consulting Group Project Files\2025-003 Ramona Opportunity Industrial\HARP\Operations\Ramona Industrial Operations\hra\ProjectOperations10102025HRAInput.hra

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*HARP - HRACalc v22118 10/10/2025 6:50:57 PM - Chronic Risk - Input File: D:\Extra HDD Files\JK Consulting Group Project Files\2025-003 Ramona Opportunity Industrial\HARP\Operations\Ramona Industrial Operations\hra\ProjectOperationsChronic10102025HRAInput.hra

AEC	GRP	NETID	X	Y	SCENARIO CV	CNS	IMMUN	KIDNEY	GILV	REPRO/DE RESP	SKIN	EYE	BONE/TEET ENDO	BLOOD	ODOR	GENERAL	MAXHI
1	SENSITIV	Little L	637921.7	4267468	NonCancer 0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.5131e-06	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.5131e-06
2	SENSITIV	SFR 1	638181.6	4267462	NonCancer 0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	2.1069e-05	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	2.1069e-05
3	SENSITIV	SFR 2	638189.6	4267436	NonCancer 0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	2.9547e-05	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	2.9547e-05
4	SENSITIV	SFR 3	638208	4267422	NonCancer 0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	4.1031e-05	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	4.1031e-05
5	SENSITIV	Apartment	637779.4	4267667	NonCancer 0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	9.954e-07	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	9.954e-07
6	SENSITIV	School 1	638408.6	4267327	NonCancer 0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.5339e-06	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.5339e-06
7	PROPERTY		638031.1	4267388	NonCancer 0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	2.6987e-06	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	2.6987e-06
8	PROPERTY		638056.4	4267345	NonCancer 0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	2.7947e-06	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	2.7947e-06
9	PROPERTY		638081.6	4267301	NonCancer 0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	3.2386e-06	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	3.2386e-06
10	PROPERTY		638106.9	4267258	NonCancer 0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	3.762e-06	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	3.762e-06
11	PROPERTY		638111.5	4267250	NonCancer 0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	3.4175e-06	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	3.4175e-06
12	PROPERTY		638146.1	4267272	NonCancer 0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	4.9181e-06	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	4.9181e-06
13	PROPERTY		638188.4	4267299	NonCancer 0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	8.7993e-06	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	8.7993e-06
14	PROPERTY		638230.7	4267326	NonCancer 0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	9.5265e-06	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	9.5265e-06
15	PROPERTY		638268.4	4267349	NonCancer 0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	6.8526e-06	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	6.8526e-06
16	PROPERTY		638265.5	4267354	NonCancer 0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	7.2265e-06	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	7.2265e-06
17	PROPERTY		638238.4	4267396	NonCancer 0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.6995e-05	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.6995e-05
18	PROPERTY		638227.2	4267413	NonCancer 0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	5.297e-05	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	5.297e-05
19	PROPERTY		638201.1	4267400	NonCancer 0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	6.5073e-05	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	6.5073e-05
20	PROPERTY		638186	4267392	NonCancer 0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	6.4507e-05	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	6.4507e-05
21	PROPERTY		638168	4267419	NonCancer 0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	3.1965e-05	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	3.1965e-05
22	PROPERTY		638163.5	4267426	NonCancer 0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	2.8838e-05	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	2.8838e-05
23	PROPERTY		638123.2	4267415	NonCancer 0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.8547e-05	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.8547e-05
24	PROPERTY		638107.6	4267410	NonCancer 0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.3288e-05	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	1.3288e-05
25	PROPERTY		638075.2	4267401	NonCancer 0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	9.5855e-06	0.0e+00	0.0e+00	0.0e+00	0.0e+00	0.0e+00	9.5855e-06

APPENDIX D

EMFAC Worksheets



Source: EMFAC2021 (v1.0.2) Emission Rates

Region Type: County

Region: Sacramento

Calendar Year: 2025

Season: Annual

Vehicle Classification: EMFAC2011 Categories

Units: miles/year for Combustion VMT and Electric VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HOTSOAK and RUNLOSS, g/vehicle/day for IDLEX and DIURN.

Region	Calendar Y	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Nox_RUNE	Nox_IDLEX	Nox_STRE	PM2.5_RUN	PM2.5_IDL	PM2.5_STR	PM2.5_PM	PM2.5_PMI	PM10_RUN	PM10_IDLE	PM10_STRI	PM10_PMT	PM10_PMB	CO2_RUNE	CO2_IDLEX	CO2_STRE	CH4_RUNE
Sacramento	2025	All Other Buses	Aggregate	Aggregate	Diesel	459.1525	24332.46	24332.46	0	4086.458	2.553603	4.078175	1.234006	0.074231	0.028045	0	0.003	0.016148	0.077587	0.029313	0	0.012	0.046137	1139.596	627.8624	0	0.009296
Sacramento	2025	LDA	Aggregate	Aggregate	Diesel	1553.179	41591.19	41591.19	0	6423.396	0.216041	0	0	0.013431	0	0	0.002	0.002829	0.014038	0	0	0.008	0.008084	234.5259	0	0	0.001211
Sacramento	2025	LDT1	Aggregate	Aggregate	Diesel	18.32966	167.4891	167.4891	0	51.70598	1.582553	0	0	0.228399	0	0	0.002	0.003877	0.238727	0	0	0.008	0.011076	426.9906	0	0	0.013531
Sacramento	2025	LDT2	Aggregate	Aggregate	Diesel	742.8591	29745.88	29745.88	0	3530.433	0.046757	0	0	0.004716	0	0	0.002	0.003252	0.00493	0	0	0.008	0.00929	306.6242	0	0	0.000714
Sacramento	2025	LHD1	Aggregate	Aggregate	Diesel	14102.97	504881.7	504881.7	0	177397.7	2.070413	2.131684	0	0.045465	0.026713	0	0.003	0.0273	0.047521	0.027921	0	0.012	0.078	630.6864	134.2063	0	0.009775
Sacramento	2025	LHD2	Aggregate	Aggregate	Diesel	5366.008	203025	203025	0	67497.63	1.423153	2.004358	0	0.036882	0.026433	0	0.003	0.03185	0.03855	0.027628	0	0.012	0.091	759.1613	212.1585	0	0.008148
Sacramento	2025	MDV	Aggregate	Aggregate	Diesel	2523.926	93387.6	93387.6	0	11727.82	0.061998	0	0	0.006088	0	0	0.002	0.00339	0.006363	0	0	0.008	0.009687	411.3028	0	0	0.000678
Sacramento	2025	MH	Aggregate	Aggregate	Diesel	1085.673	9792.362	9792.362	0	108.5673	4.788797	0	0	0.116901	0	0	0.004	0.015695	0.122186	0	0	0.016	0.044842	1080.87	0	0	0.006408
Sacramento	2025	Motor Coach	Aggregate	Aggregate	Diesel	96.2628	12872.05	12872.05	0	2212.579	1.671938	45.19802	2.068041	0.028411	0.016266	0	0.003	0.025953	0.029696	0.017002	0	0.012	0.074152	1752.529	10255	0	0.000668
Sacramento	2025	PTO	Aggregate	Aggregate	Diesel	0	23918.82	23918.82	0	0	2.926392	0	0	0.004474	0	0	0	0	0.004676	0	0	0	0	2028.679	0	0	0.000945
Sacramento	2025	SBUS	Aggregate	Aggregate	Diesel	978.3427	21557.86	21557.86	0	14166.4	4.674409	24.8154	0.41146	0.024121	0.023194	0	0.003	0.015721	0.025212	0.024243	0	0.012	0.044917	1146.863	2267.988	0	0.003274
Sacramento	2025	T6 CAIRP heavy	Aggregate	Aggregate	Diesel	84.43564	17260.2	17260.2	0	1940.331	0.379653	2.737635	0.581889	0.006453	0.000682	0	0.003	0.01481	0.006744	0.000713	0	0.012	0.042314	1030.159	575.6222	0	0.00029
Sacramento	2025	T6 CAIRP small	Aggregate	Aggregate	Diesel	77.68381	4535.474	4535.474	0	1785.174	0.349851	2.785114	0.588232	0.006777	0.001423	0	0.003	0.01481	0.007084	0.001488	0	0.012	0.042314	1108.141	576.3261	0	0.000354
Sacramento	2025	T6 instate heavy	Aggregate	Aggregate	Diesel	1768.445	92741.44	92741.44	0	20959.97	0.846208	10.47258	1.806674	0.005038	0.009608	0	0.003	0.015808	0.005266	0.010042	0	0.012	0.045166	1099.868	2214.305	0	0.000477
Sacramento	2025	T6 instate small	Aggregate	Aggregate	Diesel	8365.227	337779.3	337779.3	0	103415.7	0.767081	10.75536	1.70184	0.009421	0.016804	0	0.003	0.015937	0.009846	0.017564	0	0.012	0.045535	1142.391	2143.363	0	0.000967
Sacramento	2025	T6 OOS heavy	Aggregate	Aggregate	Diesel	40.09778	10210.9	10210.9	0	921.447	0.397097	2.861241	0.591233	0.006549	0.000682	0	0.003	0.01481	0.006845	0.000713	0	0.012	0.042314	1021.764	572.2865	0	0.000291
Sacramento	2025	T6 OOS small	Aggregate	Aggregate	Diesel	40.14341	2333.456	2333.456	0	922.4957	0.396707	2.95122	0.596022	0.007775	0.002113	0	0.003	0.01481	0.008127	0.002208	0	0.012	0.042314	1092.712	570.22	0	0.000443
Sacramento	2025	T6 Public	Aggregate	Aggregate	Diesel	4371.277	177571.6	177571.6	0	22424.65	4.609337	32.56813	1.070797	0.026934	0.0611	0	0.003	0.016159	0.028152	0.063862	0	0.012	0.046169	1208.658	3287.432	0	0.003207
Sacramento	2025	T6 Utility	Aggregate	Aggregate	Diesel	56.86646	2380.677	2380.677	0	727.8907	0.443757	7.486034	1.388058	0.00278	0.001874	0	0.003	0.015924	0.002906	0.001959	0	0.012	0.045497	1100.78	1608.351	0	0.000317
Sacramento	2025	T7 CAIRP	Aggregate	Aggregate	Diesel	929.9493	188598	188598	0	21370.23	1.482817	115.1952	2.22287	0.03031	0.042485	0	0.009	0.025998	0.03168	0.044406	0	0.036	0.074281	1518.199	23726.49	0	0.000577
Sacramento	2025	T7 NNOOS	Aggregate	Aggregate	Diesel	819.5219	223562.8	223562.8	0	18832.61	1.462323	153.1661	2.317125	0.029161	0.05273	0	0.009	0.025994	0.030479	0.055114	0	0.036	0.074269	1484.384	28627.51	0	0.000564
Sacramento	2025	T7 NOOS	Aggregate	Aggregate	Diesel	347.6814	81289.09	81289.09	0	7989.719	1.529135	153.2075	2.2893	0.031194	0.05273	0	0.009	0.026002	0.032604	0.055114	0	0.036	0.074292	1503.093	29137.32	0	0.000591
Sacramento	2025	T7 Other Port	Aggregate	Aggregate	Diesel	11.26841	2092.188	2092.188	0	184.3512	1.624376	39.58738	2.331212	0.019239	0.013919	0	0.009	0.029852	0.020109	0.014549	0	0.036	0.08529	1653.745	8263.057	0	0.000538
Sacramento	2025	T7 POAK	Aggregate	Aggregate	Diesel	37.31875	3714.977	3714.977	0	610.5347	1.703544	39.36226	2.347129	0.019233	0.013919	0	0.009	0.029849	0.020103	0.014549	0	0.036	0.085284	1650.283	8192.538	0	0.000557
Sacramento	2025	T7 Public	Aggregate	Aggregate	Diesel	4147.789	177768.4	177768.4	0	21278.16	7.604879	31.30199	3.618602	0.043469	0.071568	0	0.009	0.039209	0.045435	0.074804	0	0.036	0.112024	1852.854	3217.095	0	0.005205
Sacramento	2025	T7 Single	Aggregate	Aggregate	Diesel	2054.519	117224.2	117224.2	0	19353.57	1.286547	21.62047	3.247714	0.016066	0.013289	0	0.009	0.02815	0.016792	0.01389	0	0.036	0.080428	1648.39	4481.077	0	0.000578
Sacramento	2025	T7 SWCV	Aggregate	Aggregate	Diesel	285.4256	18514.45	18514.45	0	1312.958	12.80748	52.42459	1.044631	0.014662	0.102673	0	0.009	0.0735	0.015325	0.107315	0	0.036	0.21	4222.084	3927.978	0	0.000864
Sacramento	2025	T7 Tractor	Aggregate	Aggregate	Diesel	1028.071	77318.93	77318.93	0	14937.88	1.558021	40.00644	3.950793	0.022014	0.015443	0	0.009	0.027453	0.023009	0.016141	0	0.036	0.078437	1540.983	8258.786	0	0.000656
Sacramento	2025	T7 Utility	Aggregate	Aggregate	Diesel	29.57644	1313.929	1313.929	0	378.5784	1.286819	7.387658	4.975077	0.006881	0.002587	0	0.009	0.032945	0.007192	0.002704	0	0.036	0.094129	1703.947	1578.977	0	0.000587
Sacramento	2025	UBUS	Aggregate	Aggregate	Diesel	6.215217	294.3637	294.3637	0	24.80607	0.226676	0	0	0.004106	0	0	0.005269	0.0385	0.004292	0	0	0.021075	0.11	1074.17	0	0	0.002182

CH4_IDLE	CH4_STRE	N2O_RUNE	N2O_IDLE	N2O_STRE	ROG_RUNE	ROG_IDLE	ROG_STRE	ROG_HOTS	ROG_RUNL	ROG_DIUR	TOG_RUNE	TOG_IDLE	TOG_STRE	TOG_HOTS	TOG_RUNL	TOG_DIUR	NH3_RUNE	CO_RUNE	CO_IDLE	CO_STRE	SOx_RUNE	SOx_IDLE	SOx_STRE
0.005926	0	0.179544	0.09892	0	0.200132	0.127583	0	0	0	0	0.227835	0.145244	0	0	0	0	0.198093	0.545353	2.323075	0	0.010791	0.005945	0
0	0	0.03695	0	0	0.026077	0	0	0	0	0	0.029686	0	0	0	0	0	0.0031	0.362243	0	0	0.002222	0	0
0	0	0.067273	0	0	0.29132	0	0	0	0	0	0.331649	0	0	0	0	0	0.0031	1.565215	0	0	0.004046	0	0
0	0	0.048309	0	0	0.015374	0	0	0	0	0	0.017503	0	0	0	0	0	0.0031	0.15532	0	0	0.002905	0	0
0.005098	0	0.099365	0.021144	0	0.210453	0.10976	0	0	0	0	0.239587	0.124954	0	0	0	0	0.155971	0.610009	0.909745	0	0.005976	0.001272	0
0.005098	0	0.119606	0.033426	0	0.175425	0.10976	0	0	0	0	0.19971	0.124954	0	0	0	0	0.177518	0.468735	0.909745	0	0.007193	0.00201	0
0	0	0.064801	0	0	0.014607	0	0	0	0	0	0.016629	0	0	0	0	0	0.0031	0.257381	0	0	0.003897	0	0
0	0	0.170291	0	0	0.137965	0	0	0	0	0	0.157064	0	0	0	0	0	0.134194	0.469496	0	0	0.010242	0	0
0.18553	0	0.276112	1.61568	0	0.014373	3.994405	0	0	0	0	0.016362	4.547325	0	0	0	0	0.22	0.070265	58.72166	0	0.016595	0.097109	0
		0.319619			0.02035						0.023167						0.219904	0.238049			0.01921		
0.007834	0	0.180689	0.357323	0	0.070487	0.168654	0	0	0	0	0.080245	0.192	0	0	0	0	0.131432	0.214359	4.145509	0	0.01086	0.021476	0
0.002294	0	0.162302	0.09069	0	0.006242	0.049391	0	0	0	0	0.007107	0.056228	0	0	0	0	0.22	0.03196	2.085054	0	0.009755	0.005451	0
0.002384	0	0.174588	0.0908	0	0.007615	0.051331	0	0	0	0	0.00867	0.058436	0	0	0	0	0.219284	0.033289	2.093043	0	0.010493	0.005457	0
0.009263	0	0.173285	0.348865	0	0.010265	0.199428	0	0	0	0	0.011685	0.227033	0	0	0	0	0.219919	0.069998	7.49978	0	0.010415	0.020968	0
0.009916	0	0.179984	0.337688	0	0.020811	0.213493	0	0	0	0	0.023692	0.243046	0	0	0	0	0.21692	0.091004	7.545233	0	0.010818	0.020296	0
0.002294	0	0.160979	0.090164	0	0.006268	0.049385	0	0	0	0	0.007136	0.056221	0	0	0	0	0.22	0.032298	2.085451	0	0.009675	0.005419	0
0.002468	0	0.172157	0.089838	0	0.009529	0.053145	0	0	0	0	0.010848	0.060501	0	0	0	0	0.218619	0.037909	2.099737	0	0.010347	0.0054	0
0.016325	0	0.190425	0.517936	0	0.069044	0.351463	0	0	0	0	0.078601	0.400114	0	0	0	0	0.148257	0.168041	7.358239	0	0.011445	0.03113	0
0.006325	0	0.173428	0.253396	0	0.006832	0.136176	0	0	0	0	0.007778	0.155026	0	0	0	0	0.22	0.047229	5.702035	0	0.010424	0.01523	0
0.484628	0	0.239193	3.738118	0	0.012423	10.43391	0	0	0	0	0.014142	11.87822	0	0	0	0	0.22	0.052843	153.9858	0	0.014376	0.224676	0
0.601494	0	0.233865	4.510277	0	0.01215	12.95	0	0	0	0	0.013831	14.74259	0	0	0	0	0.22	0.048392	191.1794	0	0.014056	0.271085	0
0.60149	0	0.236813	4.590596	0	0.012721	12.94991	0	0	0	0	0.014482	14.74249	0	0	0	0	0.22	0.053957	191.1261	0	0.014233	0.275913	0
0.158784	0	0.260548	1.301848	0	0.011592	3.41858	0	0	0	0	0.013197	3.891793	0	0	0	0	0.22	0.099405	50.51232	0	0.01566	0.078246	0
0.158784	0	0.260003	1.290738	0	0.011998	3.41858	0	0	0	0	0.013659	3.891793	0	0	0	0	0.22	0.104151	50.51232	0	0.015627	0.077578	0
0.053856	0	0.291918	0.506855	0	0.112057	1.159498	0	0	0	0	0.127568	1.32	0	0	0	0	0.140763	0.373146	10.91387	0	0.017545	0.030464	0
0.087158	0	0.259705	0.705996	0	0.012444	1.876496	0	0	0	0	0.014166	2.136248	0	0	0	0	0.219901	0.075465	27.14636	0	0.015609	0.042433	0
0.050438	0	0.665191	0.618855	0	0.0186	1.085913	0	0	0	0	0.021175	1.236229	0	0	0	0	0.062243	0.05397	6.917285	0	0.039981	0.037196	0
0.160449	0	0.242783	1.301175	0	0.014115	3.45442	0	0	0	0	0.016069	3.932595	0	0	0	0	0.219982	0.077866	50.63583	0	0.014592	0.078206	0
0.029512	0	0.268458	0.248768	0	0.012639	0.635394	0	0	0	0	0.014389	0.723348	0	0	0	0	0.22	0.130419	9.368871	0	0.016135	0.014952	0
0	0	0.169236	0	0	0.046984	0	0	0	0	0	0.053488	0	0	0	0	0	0.22	0.046938	0	0	0.010178	0	0

Source: EMFAC2021 (v1.0.2) Emission Rates

Region Type: County

Region: Sacramento

Calendar Year: 2025

Season: Annual

Vehicle Classification: EMFAC2011 Categories

Units: miles/year for Combustion VMT and Electric VMT, g/mile for RUNEX, PMBW and PMTW, mph for Speed, gallon/mile for Fuel Consumption, kWh/mile for Energy Consumption.

Region	Calendar Y	Vehicle Category	Model Year	Speed	Fuel	Total VMT	CVMT	EVMT	NOx_RUNE	PM2.5_RUNE	PM10_RUNE	CO2_RUNE	CH4_RUNE	N2O_RUNE	ROG_RUNE	TOG_RUNE	CO_RUNE	SOx_RUNE	NH3_RUNE	PM10_PMB	PM2.5_PMI	Fuel Consu	Energy Consumption
Sacramento	2025	All Other Buses	Aggregate	5	Diesel	391.0929	391.0929	0	7.163415	0.251241	0.262601	2387.737	0.058193	0.376189	1.252876	1.426304	1.893511	0.02261	0.198093	0.061496	0.021524	0.235118	0
Sacramento	2025	All Other Buses	Aggregate	10	Diesel	1182.318	1182.318	0	5.729046	0.2087	0.218136	1995.106	0.043851	0.31433	0.944091	1.074775	1.503513	0.018892	0.198093	0.061496	0.021524	0.196456	0
Sacramento	2025	All Other Buses	Aggregate	15	Diesel	1344.819	1344.819	0	4.101885	0.140291	0.146634	1578.412	0.02328	0.248679	0.501217	0.570597	1.043407	0.014947	0.198093	0.061496	0.021524	0.155425	0
Sacramento	2025	All Other Buses	Aggregate	20	Diesel	1561.89	1561.89	0	3.274787	0.093265	0.097482	1342.052	0.011163	0.211441	0.240344	0.273613	0.75857	0.012708	0.198093	0.06063	0.021221	0.132151	0
Sacramento	2025	All Other Buses	Aggregate	25	Diesel	1899.746	1899.746	0	2.809029	0.074438	0.077804	1202.941	0.007992	0.189524	0.172066	0.195884	0.614547	0.011391	0.198093	0.049809	0.017433	0.118452	0
Sacramento	2025	All Other Buses	Aggregate	30	Diesel	2590.482	2590.482	0	2.431534	0.063699	0.066579	1101.624	0.006494	0.173561	0.139816	0.15917	0.514728	0.010432	0.198093	0.044399	0.01554	0.108476	0
Sacramento	2025	All Other Buses	Aggregate	35	Diesel	4764.91	4764.91	0	2.142729	0.056244	0.058787	1025.34	0.00534	0.161543	0.114973	0.130888	0.432326	0.009709	0.198093	0.041585	0.014555	0.100964	0
Sacramento	2025	All Other Buses	Aggregate	40	Diesel	5664.911	5664.911	0	1.945258	0.052073	0.054427	973.8872	0.004524	0.153436	0.097396	0.110878	0.366987	0.009222	0.198093	0.041585	0.014555	0.095898	0
Sacramento	2025	All Other Buses	Aggregate	45	Diesel	3590.549	3590.549	0	1.837627	0.051192	0.053507	947.1456	0.004039	0.149223	0.08696	0.098998	0.318472	0.008969	0.198093	0.041585	0.014555	0.093264	0
Sacramento	2025	All Other Buses	Aggregate	50	Diesel	1060.022	1060.022	0	1.820239	0.053618	0.056042	945.0409	0.003881	0.148892	0.083549	0.095114	0.286641	0.008949	0.198093	0.041585	0.014555	0.093057	0
Sacramento	2025	All Other Buses	Aggregate	55	Diesel	262.4347	262.4347	0	1.894991	0.05937	0.062054	967.5246	0.004043	0.152434	0.087044	0.099093	0.271425	0.009162	0.198093	0.041585	0.014555	0.095271	0
Sacramento	2025	All Other Buses	Aggregate	60	Diesel	19.27924	19.27924	0	2.042239	0.064541	0.067459	1014.674	0.004283	0.159862	0.09222	0.104985	0.271143	0.009608	0.198093	0.041585	0.014555	0.099914	0
Sacramento	2025	All Other Buses	Aggregate	65	Diesel	0.00918	0.00918	0	2.259071	0.069667	0.069995	1085.437	0.004373	0.171011	0.094157	0.10719	0.276618	0.010278	0.198093	0.041585	0.014555	0.106882	0
Sacramento	2025	LDA	Aggregate	5	Diesel	19.90242	19.90242	0	0.265286	0.047811	0.049973	594.9078	0.012337	0.093728	0.265607	0.302376	4.51748	0.005637	0.0031	0.00609	0.002131	0.05858	0
Sacramento	2025	LDA	Aggregate	10	Diesel	91.68673	91.68673	0	0.250043	0.035348	0.036946	495.6144	0.009086	0.078084	0.195621	0.222702	3.366285	0.004696	0.0031	0.007532	0.002636	0.048803	0
Sacramento	2025	LDA	Aggregate	15	Diesel	304.6416	304.6416	0	0.220594	0.026894	0.02811	407.6414	0.004912	0.064224	0.105753	0.120393	1.71811	0.003863	0.0031	0.008965	0.003138	0.04014	0
Sacramento	2025	LDA	Aggregate	20	Diesel	4369.699	4369.699	0	0.202587	0.021134	0.022089	334.3983	0.002448	0.052685	0.052709	0.060006	0.753469	0.003169	0.0031	0.010407	0.003642	0.032928	0
Sacramento	2025	LDA	Aggregate	25	Diesel	1974.314	1974.314	0	0.198293	0.017212	0.01799	280.3066	0.001687	0.044162	0.036312	0.041339	0.490986	0.002656	0.0031	0.011591	0.004057	0.027602	0
Sacramento	2025	LDA	Aggregate	30	Diesel	2640.95	2640.95	0	0.199556	0.014629	0.01529	242.7969	0.001344	0.038253	0.028927	0.032932	0.387431	0.002301	0.0031	0.012536	0.004388	0.023908	0
Sacramento	2025	LDA	Aggregate	35	Diesel	5334.799	5334.799	0	0.203098	0.012917	0.013501	219.4835	0.001126	0.03458	0.024237	0.027592	0.323337	0.00208	0.0031	0.013472	0.004715	0.021612	0
Sacramento	2025	LDA	Aggregate	40	Diesel	5154.152	5154.152	0	0.20794	0.011821	0.012355	205.3875	0.000985	0.032359	0.021215	0.024152	0.282802	0.001946	0.0031	0.012312	0.004309	0.020224	0
Sacramento	2025	LDA	Aggregate	45	Diesel	3713.958	3713.958	0	0.213581	0.011198	0.011704	198.3885	0.000898	0.031256	0.019344	0.022022	0.258362	0.00188	0.0031	0.009056	0.00317	0.019535	0
Sacramento	2025	LDA	Aggregate	50	Diesel	2312.125	2312.125	0	0.21958	0.010981	0.011478	198.8935	0.000853	0.031336	0.018363	0.020905	0.246659	0.001885	0.0031	0.005792	0.002027	0.019585	0
Sacramento	2025	LDA	Aggregate	55	Diesel	6432.161	6432.161	0	0.225889	0.011159	0.011664	208.1264	0.000844	0.03279	0.018165	0.02068	0.246905	0.001972	0.0031	0.003728	0.001305	0.020494	0
Sacramento	2025	LDA	Aggregate	60	Diesel	7476.942	7476.942	0	0.233647	0.011855	0.012391	225.634	0.000885	0.035549	0.019056	0.021694	0.266351	0.002138	0.0031	0.002858	0.001	0.022218	0
Sacramento	2025	LDA	Aggregate	65	Diesel	924.2432	924.2432	0	0.241829	0.013163	0.013758	253.6583	0.00098	0.039964	0.021091	0.02401	0.307461	0.002404	0.0031	0.001989	0.000696	0.024977	0
Sacramento	2025	LDA	Aggregate	70	Diesel	841.6199	841.6199	0	0.245537	0.014074	0.01471	273.9109	0.001046	0.043155	0.022509	0.025625	0.336236	0.002595	0.0031	0.001989	0.000696	0.026972	0
Sacramento	2025	LDT1	Aggregate	5	Diesel	0.080148	0.080148	0	1.10755	0.935369	0.977663	1067.705	0.055673	0.168217	1.198613	1.364541	4.61805	0.010117	0.0031	0.009712	0.003399	0.105136	0
Sacramento	2025	LDT1	Aggregate	10	Diesel	0.369226	0.369226	0	1.165443	0.651197	0.680641	898.7582	0.038773	0.1416	0.834764	0.950323	3.282127	0.008516	0.0031	0.012083	0.004229	0.0885	0
Sacramento	2025	LDT1	Aggregate	15	Diesel	1.226802	1.226802	0	1.222614	0.474409	0.49586	745.2186	0.028188	0.11741	0.606869	0.69088	2.443982	0.007061	0.0031	0.014467	0.005063	0.073381	0
Sacramento	2025	LDT1	Aggregate	20	Diesel	17.59693	17.59693	0	1.281827	0.361661	0.378014	612.254	0.021444	0.096461	0.461682	0.525594	1.91691	0.005801	0.0031	0.016838	0.005893	0.060288	0
Sacramento	2025	LDT1	Aggregate	25	Diesel	7.95063	7.95063	0	1.342807	0.288511	0.301557	513.3529	0.017097	0.080879	0.368098	0.419056	1.588312	0.004864	0.0031	0.017815	0.006235	0.050549	0
Sacramento	2025	LDT1	Aggregate	30	Diesel	10.6352	10.6352	0	1.404559	0.240846	0.251736	443.905	0.01427	0.069937	0.30723	0.349761	1.386967	0.004206	0.0031	0.017386	0.006085	0.043711	0
Sacramento	2025	LDT1	Aggregate	35	Diesel	21.48342	21.48342	0	1.468171	0.210392	0.219905	400.6413	0.012464	0.063121	0.268343	0.30549	1.275546	0.003796	0.0031	0.016957	0.005935	0.039451	0
Sacramento	2025	LDT1	Aggregate	40	Diesel	20.75594	20.75594	0	1.53284	0.192322	0.201018	373.9268	0.011392	0.058912	0.245264	0.279216	1.235403	0.003543	0.0031	0.014967	0.005239	0.03682	0
Sacramento	2025	LDT1	Aggregate	45	Diesel	14.95623	14.95623	0	1.598073	0.183967	0.192285	360.5288	0.010896	0.056801	0.23458	0.267054	1.260084	0.003416	0.0031	0.011416	0.003996	0.035501	0
Sacramento	2025	LDT1	Aggregate	50	Diesel	9.311006	9.311006	0	1.662363	0.184145	0.192471	361.1278	0.010905	0.056896	0.23478	0.267282	1.353543	0.003422	0.0031	0.007865	0.002753	0.03556	0
Sacramento	2025	LDT1	Aggregate	55	Diesel	25.90253	25.90253	0	1.726409	0.192882	0.201604	377.5885	0.011421	0.059489	0.245894	0.279934	1.531188	0.003578	0.0031	0.00547	0.001914	0.037181	0
Sacramento	2025	LDT1	Aggregate	60	Diesel	30.1099	30.1099	0	1.795486	0.211418	0.220977	409.0056	0.012518	0.064439	0.269507	0.306815	1.824304	0.003876	0.0031				

Sacramento	2025 LHD1	Aggregate	10	Diesel	29523.77	29523.77	0	2.404462	0.085821	0.089701	1031.867	0.018123	0.162571	0.390181	0.4444195	1.231068	0.009777	0.155971	0.078	0.0273	0.101607	0
Sacramento	2025 LHD1	Aggregate	15	Diesel	63940.03	63940.03	0	2.263197	0.070231	0.073407	861.095	0.014927	0.135666	0.321366	0.365854	0.984514	0.008159	0.155971	0.078	0.0273	0.084791	0
Sacramento	2025 LHD1	Aggregate	20	Diesel	70098.93	70098.93	0	2.142121	0.057747	0.060359	744.4356	0.012403	0.117286	0.26703	0.303996	0.790741	0.007054	0.155971	0.078	0.0273	0.073304	0
Sacramento	2025 LHD1	Aggregate	25	Diesel	75024.55	75024.55	0	2.052621	0.047637	0.049791	647.4302	0.010364	0.102003	0.22312	0.254008	0.63595	0.006135	0.155971	0.078	0.0273	0.063752	0
Sacramento	2025 LHD1	Aggregate	30	Diesel	63330.23	63330.23	0	1.978014	0.039477	0.041262	567.5564	0.0087	0.089419	0.187297	0.213225	0.512342	0.005378	0.155971	0.078	0.0273	0.055887	0
Sacramento	2025 LHD1	Aggregate	35	Diesel	33421.82	33421.82	0	1.93745	0.03302	0.034513	509.225	0.007348	0.080229	0.158188	0.180087	0.415554	0.004825	0.155971	0.078	0.0273	0.050143	0
Sacramento	2025 LHD1	Aggregate	40	Diesel	18347.49	18347.49	0	1.918636	0.028122	0.029394	463.2837	0.00627	0.072991	0.134994	0.153682	0.343332	0.00439	0.155971	0.078	0.0273	0.045619	0
Sacramento	2025 LHD1	Aggregate	45	Diesel	19802.97	19802.97	0	1.914349	0.024703	0.025819	431.9283	0.005447	0.06805	0.117273	0.133507	0.294901	0.004093	0.155971	0.078	0.0273	0.042532	0
Sacramento	2025 LHD1	Aggregate	50	Diesel	76465.55	76465.55	0	1.93415	0.022726	0.023754	419.8802	0.004869	0.066152	0.104828	0.11934	0.270748	0.003979	0.155971	0.078	0.0273	0.041345	0
Sacramento	2025 LHD1	Aggregate	55	Diesel	46048.25	46048.25	0	1.988733	0.022194	0.023197	422.0881	0.004536	0.0665	0.097665	0.111185	0.27276	0.003999	0.155971	0.078	0.0273	0.041563	0
Sacramento	2025 LHD2	Aggregate	5	Diesel	3570.101	3570.101	0	2.047156	0.081921	0.085625	1405.766	0.017303	0.221479	0.372532	0.424102	1.190022	0.01332	0.177518	0.091	0.03185	0.138424	0
Sacramento	2025 LHD2	Aggregate	10	Diesel	11872.21	11872.21	0	1.85447	0.067881	0.07095	1225.793	0.014488	0.193124	0.311927	0.355109	0.96184	0.011615	0.177518	0.091	0.03185	0.120703	0
Sacramento	2025 LHD2	Aggregate	15	Diesel	25711.82	25711.82	0	1.689224	0.056448	0.059	1046.079	0.012234	0.16481	0.263396	0.299859	0.778608	0.009912	0.177518	0.091	0.03185	0.103006	0
Sacramento	2025 LHD2	Aggregate	20	Diesel	28188.45	28188.45	0	1.545328	0.046973	0.049097	905.7844	0.010371	0.142707	0.223288	0.254199	0.628008	0.008583	0.177518	0.091	0.03185	0.089192	0
Sacramento	2025 LHD2	Aggregate	25	Diesel	30169.17	30169.17	0	1.43103	0.039091	0.040858	787.3028	0.008804	0.12404	0.189548	0.215787	0.503188	0.00746	0.177518	0.091	0.03185	0.077525	0
Sacramento	2025 LHD2	Aggregate	30	Diesel	25466.6	25466.6	0	1.334578	0.03259	0.034063	688.5271	0.007477	0.108478	0.160986	0.183272	0.400276	0.006524	0.177518	0.091	0.03185	0.067799	0
Sacramento	2025 LHD2	Aggregate	35	Diesel	13439.71	13439.71	0	1.269123	0.027346	0.028582	612.7561	0.006359	0.09654	0.136906	0.155859	0.317104	0.005806	0.177518	0.091	0.03185	0.060337	0
Sacramento	2025 LHD2	Aggregate	40	Diesel	7377.963	7377.963	0	1.226312	0.023286	0.024339	554.1598	0.00543	0.087308	0.116904	0.133087	0.252554	0.005251	0.177518	0.091	0.03185	0.054568	0
Sacramento	2025 LHD2	Aggregate	45	Diesel	7963.249	7963.249	0	1.201794	0.020372	0.021293	514.1702	0.00468	0.081008	0.100753	0.114701	0.20624	0.004872	0.177518	0.091	0.03185	0.05063	0
Sacramento	2025 LHD2	Aggregate	50	Diesel	30748.63	30748.63	0	1.201785	0.018585	0.019425	495.6858	0.004104	0.078095	0.088355	0.100586	0.178404	0.004697	0.177518	0.091	0.03185	0.04881	0
Sacramento	2025 LHD2	Aggregate	55	Diesel	18517.1	18517.1	0	1.232868	0.017926	0.018736	495.8225	0.003702	0.078117	0.079712	0.090747	0.169984	0.004698	0.177518	0.091	0.03185	0.048823	0
Sacramento	2025 MDV	Aggregate	5	Diesel	44.68829	44.68829	0	0.157564	0.017891	0.0187	971.8077	0.010144	0.153109	0.218398	0.248631	4.281213	0.009208	0.0031	0.008494	0.002973	0.095693	0
Sacramento	2025 MDV	Aggregate	10	Diesel	205.8706	205.8706	0	0.138669	0.014475	0.015129	825.3013	0.007559	0.130027	0.162741	0.18527	3.201666	0.00782	0.0031	0.010568	0.003699	0.081267	0
Sacramento	2025 MDV	Aggregate	15	Diesel	684.033	684.033	0	0.101627	0.011664	0.012191	699.911	0.003802	0.110271	0.081854	0.093185	1.57881	0.006632	0.0031	0.012652	0.004428	0.06892	0
Sacramento	2025 MDV	Aggregate	20	Diesel	9811.589	9811.589	0	0.077837	0.00951	0.00994	581.2733	0.001604	0.09158	0.034531	0.039311	0.631615	0.005508	0.0031	0.014726	0.005154	0.057237	0
Sacramento	2025 MDV	Aggregate	25	Diesel	4433.065	4433.065	0	0.067597	0.007932	0.00829	491.5264	0.001013	0.07744	0.021819	0.024839	0.387193	0.004657	0.0031	0.015581	0.005453	0.0484	0
Sacramento	2025 MDV	Aggregate	30	Diesel	5929.909	5929.909	0	0.062845	0.006876	0.007187	424.5257	0.000782	0.066884	0.16831	0.019161	0.29592	0.004023	0.0031	0.015206	0.005322	0.041803	0
Sacramento	2025 MDV	Aggregate	35	Diesel	11978.59	11978.59	0	0.06019	0.006142	0.006419	385.1984	0.000635	0.060688	0.13672	0.015564	0.238478	0.00365	0.0031	0.014831	0.005191	0.03793	0
Sacramento	2025 MDV	Aggregate	40	Diesel	11572.97	11572.97	0	0.058735	0.005627	0.005882	360.3001	0.000537	0.056765	0.011558	0.013159	0.19997	0.003414	0.0031	0.01309	0.005482	0.035478	0
Sacramento	2025 MDV	Aggregate	45	Diesel	8339.207	8339.207	0	0.058023	0.005276	0.005515	346.7368	0.00047	0.054629	0.010108	0.011508	0.173237	0.003286	0.0031	0.009984	0.003495	0.034143	0
Sacramento	2025 MDV	Aggregate	50	Diesel	5191.575	5191.575	0	0.057763	0.005058	0.005287	348.4743	0.000424	0.054902	0.009119	0.010382	0.154566	0.003302	0.0031	0.006879	0.002407	0.034314	0
Sacramento	2025 MDV	Aggregate	55	Diesel	14442.58	14442.58	0	0.057836	0.004963	0.005187	367.7621	0.000394	0.057941	0.008485	0.009659	0.142044	0.003485	0.0031	0.004784	0.001674	0.036213	0
Sacramento	2025 MDV	Aggregate	60	Diesel	16788.5	16788.5	0	0.058868	0.00507	0.0053	398.2124	0.000392	0.062739	0.008446	0.009615	0.140826	0.003773	0.0031	0.0037	0.001295	0.039212	0
Sacramento	2025 MDV	Aggregate	65	Diesel	2075.267	2075.267	0	0.060453	0.00539	0.005633	447.1367	0.000414	0.070447	0.008921	0.010156	0.14939	0.004237	0.0031	0.002616	0.000916	0.044029	0
Sacramento	2025 MDV	Aggregate	70	Diesel	1889.748	1889.748	0	0.06115	0.005612	0.005866	481.3501	0.00043	0.075837	0.009253	0.010534	0.155385	0.004561	0.0031	0.002616	0.000916	0.047398	0
Sacramento	2025 MH	Aggregate	5	Diesel	266.0608	266.0608	0	14.36145	0.267385	0.279475	2152.158	0.049404	0.339073	1.063637	1.21088	2.453241	0.020393	0.134194	0.061496	0.021524	0.211921	0
Sacramento	2025 MH	Aggregate	10	Diesel	401.0451	401.0451	0	11.93021	0.227708	0.238004	1954.169	0.037198	0.30788	0.800859	0.911724	1.947233	0.018517	0.134194	0.061496	0.021524	0.192425	0
Sacramento	2025 MH	Aggregate	15	Diesel	344.1643	344.1643	0	8.196606	0.162517	0.169866	1604.542	0.018693	0.252796	0.402443	0.458154	1.158723	0.015204	0.134194	0.061496	0.021524	0.157998	0
Sacramento	2025 MH	Aggregate	20	Diesel	363.6606	363.6606	0	5.922615	0.116211	0.121465	1316.717	0.008061	0.207449	0.173548	0.195773	0.668221	0.012477	0.134194	0.06063	0.021221	0.129656	0
Sacramento	2025 MH	Aggregate	25	Diesel	419.3849	419.3849	0	5.0753	0.096587	0.100954	1181.042	0.005499	0.186074	0.118384	0.134773	0.506932	0.011191	0.134194	0.049809	0.017433	0.116296	0
Sacramento	2025 MH	Aggregate	30	Diesel	490.027	490.027	0	4.618157	0.086149	0.090044	1108.586	0.004394	0.174658	0.094593	0.107688	0.425806	0.010504	0.134194	0.044399	0.01554	0.109161	0
Sacramento	2025 MH	Aggregate	35	Diesel	549.1584	549.1584	0	4.29503	0.080102	0.083724	1048.457	0.00359	0.165185	0.077289	0.087988	0.364321	0.009935	0.134194	0.041585	0.014555	0.103241	0
Sacramento	2025 MH	Aggregate	40	Diesel	584.6068	584.6068	0	4.062595	0.078337	0.081879	1000.655	0.003019	0.157654	0.064994	0.073991	0.318303	0.009482	0.134194	0.041585	0.014555	0.098533	0
Sacramento	2025 MH	Aggregate	45	Diesel	551.9417	551.9417	0	3.896964	0.080791	0.084444	965.1785	0.002647	0.152064	0.056991	0.064881	0.285734	0.009146	0.134194	0.041585	0.014555	0.09504	0
Sacramento	2025 MH	Aggregate	50	Diesel	641.4277	641.4277	0	3.792894	0.087426	0.091379	942.0287	0.002457	0.148417	0.052898	0.060221	0.265528	0.008926	0.134194	0.041585	0.014555	0.092761	0
Sacramento	2025 MH	Aggregate	55	Diesel	1132.332	1132.332	0	3.7403	0.098217	0.102658	931.2053	0.002438	0.146712	0.05249	0.059757	0.257055	0.008824	0.134194	0.041585	0.014555	0.091695	0
Sacramento	2025 MH	Aggregate	60	Diesel	2037.051	2037.051	0	3.755643	0.113311	0.118434	932.7083	0.002612	0.146949	0.056233	0.064018	0.261629	0.008838	0.134194	0.041585	0.014555	0.091843	0
Sacramento	2025 MH	Aggregate	65	Diesel	1925.595	1925.595	0	3.832322	0.132664	0.138663	946.5377	0.002967	0.149127	0.063867	0.072709	0.278514	0.008969	0.134194	0.041585	0.014555	0.093	

Sacramento	2025	Motor Coach	Aggregate	85	Diesel	3.939739	3.939739	0	1.678481	0.033063	0.034558	1759.887	0.000682	0.277271	0.014689	0.016722	0.055735	0.016665	0.22	0.069377	0.024282	0.173294	0
Sacramento	2025	Motor Coach	Aggregate	90	Diesel	0.004949	0.004949	0	1.666954	0.033063	0.034558	1759.887	0.000686	0.277271	0.014775	0.016821	0.056755	0.016665	0.22	0.069377	0.024282	0.173294	0
Sacramento	2025	PTO	Aggregate	20	Diesel	23918.82	23918.82	0	2.926392	0.004474	0.004676	2028.679	0.000945	0.319619	0.02035	0.023167	0.238049	0.01921	0.219904	0	0	0.199762	0
Sacramento	2025	SBUS	Aggregate	10	Diesel	364.4377	364.4377	0	10.12771	0.067181	0.070219	2061.972	0.020694	0.324865	0.445534	0.507206	0.792548	0.019526	0.131432	0.061496	0.021524	0.203604	0
Sacramento	2025	SBUS	Aggregate	15	Diesel	869.7091	869.7091	0	7.111981	0.045567	0.047627	1661.398	0.011255	0.261754	0.24232	0.275863	0.529999	0.015732	0.131432	0.061496	0.021524	0.163596	0
Sacramento	2025	SBUS	Aggregate	20	Diesel	1378.908	1378.908	0	5.524849	0.030803	0.032196	1402.505	0.005924	0.220965	0.12754	0.145195	0.368345	0.013281	0.131432	0.06063	0.021221	0.138103	0
Sacramento	2025	SBUS	Aggregate	25	Diesel	1772.407	1772.407	0	5.02247	0.024806	0.025928	1264.044	0.004308	0.199151	0.092749	0.105588	0.290301	0.01197	0.131432	0.049809	0.017433	0.124469	0
Sacramento	2025	SBUS	Aggregate	30	Diesel	2280.89	2280.89	0	4.709871	0.021543	0.022517	1174.175	0.003379	0.184992	0.072753	0.082824	0.239477	0.011119	0.131432	0.044399	0.01554	0.11562	0
Sacramento	2025	SBUS	Aggregate	35	Diesel	2777.798	2777.798	0	4.468662	0.019549	0.020432	1104.99	0.002675	0.174092	0.057587	0.065558	0.199737	0.010464	0.131432	0.041585	0.014555	0.108807	0
Sacramento	2025	SBUS	Aggregate	40	Diesel	3023.807	3023.807	0	4.29638	0.018816	0.019666	1055.575	0.002168	0.166306	0.046668	0.053128	0.169658	0.009996	0.131432	0.041585	0.014555	0.103941	0
Sacramento	2025	SBUS	Aggregate	45	Diesel	2747.664	2747.664	0	4.192056	0.019344	0.020218	1025.395	0.001837	0.161551	0.039554	0.045029	0.148207	0.00971	0.131432	0.041585	0.014555	0.10097	0
Sacramento	2025	SBUS	Aggregate	50	Diesel	1924.896	1924.896	0	4.152885	0.021139	0.022094	1014.113	0.001667	0.159774	0.0359	0.04087	0.134647	0.009603	0.131432	0.041585	0.014555	0.099859	0
Sacramento	2025	SBUS	Aggregate	55	Diesel	1422.281	1422.281	0	4.179963	0.024213	0.025307	1021.511	0.001646	0.160939	0.035434	0.040339	0.128456	0.009673	0.131432	0.041585	0.014555	0.100587	0
Sacramento	2025	SBUS	Aggregate	60	Diesel	1758.842	1758.842	0	4.237057	0.026611	0.027814	1048.144	0.001706	0.165136	0.036722	0.041805	0.128153	0.009925	0.131432	0.041585	0.014555	0.10321	0
Sacramento	2025	SBUS	Aggregate	65	Diesel	947.3378	947.3378	0	4.301092	0.027526	0.028771	1090.293	0.001743	0.171776	0.037525	0.04272	0.129669	0.010324	0.131432	0.041585	0.014555	0.10736	0
Sacramento	2025	SBUS	Aggregate	70	Diesel	255.7448	255.7448	0	4.301624	0.027526	0.028771	1090.293	0.001744	0.171776	0.037538	0.042734	0.129771	0.010324	0.131432	0.041585	0.014555	0.10736	0
Sacramento	2025	SBUS	Aggregate	75	Diesel	33.10313	33.10313	0	4.296049	0.027526	0.028771	1090.293	0.001744	0.171776	0.037553	0.042751	0.129912	0.010324	0.131432	0.041585	0.014555	0.10736	0
Sacramento	2025	SBUS	Aggregate	80	Diesel	0.037055	0.037055	0	4.296409	0.027526	0.028771	1090.293	0.001745	0.171776	0.037571	0.042772	0.13009	0.010324	0.131432	0.041585	0.014555	0.10736	0
Sacramento	2025	T6 CAIRP heavy	Aggregate	10	Diesel	72.17988	72.17988	0	1.649559	0.003201	0.003346	1803.238	0.001526	0.284101	0.032861	0.037409	0.19051	0.017076	0.22	0.061496	0.021524	0.177563	0
Sacramento	2025	T6 CAIRP heavy	Aggregate	15	Diesel	198.6885	198.6885	0	1.114933	0.002327	0.002432	1416.018	0.000663	0.223094	0.014276	0.016253	0.110931	0.013409	0.22	0.061496	0.021524	0.139434	0
Sacramento	2025	T6 CAIRP heavy	Aggregate	20	Diesel	247.1175	247.1175	0	0.864126	0.001884	0.001969	1207.544	0.000386	0.190249	0.008311	0.009462	0.077708	0.011435	0.22	0.06063	0.021221	0.118906	0
Sacramento	2025	T6 CAIRP heavy	Aggregate	25	Diesel	224.0508	224.0508	0	0.671744	0.001597	0.001669	1093.626	0.00029	0.172301	0.006251	0.007116	0.063127	0.010356	0.22	0.049809	0.017433	0.107688	0
Sacramento	2025	T6 CAIRP heavy	Aggregate	30	Diesel	224.6911	224.6911	0	0.505657	0.001519	0.001588	1011.088	0.000233	0.159297	0.005006	0.005699	0.052651	0.009574	0.22	0.044399	0.01554	0.099561	0
Sacramento	2025	T6 CAIRP heavy	Aggregate	35	Diesel	254.8644	254.8644	0	0.376765	0.001675	0.001751	950.539	0.000192	0.149758	0.004131	0.004703	0.043952	0.009001	0.22	0.041585	0.014555	0.093599	0
Sacramento	2025	T6 CAIRP heavy	Aggregate	40	Diesel	348.1803	348.1803	0	0.284992	0.002065	0.002158	911.8252	0.000168	0.143658	0.003623	0.004125	0.037021	0.008634	0.22	0.041585	0.014555	0.089787	0
Sacramento	2025	T6 CAIRP heavy	Aggregate	45	Diesel	380.5685	380.5685	0	0.230247	0.002688	0.00281	894.8	0.000162	0.140976	0.003481	0.003963	0.03185	0.008473	0.22	0.041585	0.014555	0.08811	0
Sacramento	2025	T6 CAIRP heavy	Aggregate	50	Diesel	469.3267	469.3267	0	0.212698	0.003545	0.003705	899.32	0.000172	0.141688	0.003704	0.004216	0.028433	0.008516	0.22	0.041585	0.014555	0.088555	0
Sacramento	2025	T6 CAIRP heavy	Aggregate	55	Diesel	746.4253	746.4253	0	0.23239	0.004635	0.004844	926.9607	0.000199	0.146043	0.004289	0.004883	0.026767	0.008778	0.22	0.041585	0.014555	0.091277	0
Sacramento	2025	T6 CAIRP heavy	Aggregate	60	Diesel	2375.643	2375.643	0	0.289383	0.005958	0.006228	976.085	0.000243	0.153783	0.005241	0.005966	0.026859	0.009243	0.22	0.041585	0.014555	0.096114	0
Sacramento	2025	T6 CAIRP heavy	Aggregate	65	Diesel	4541.699	4541.699	0	0.383313	0.007516	0.007855	1046.686	0.000304	0.164906	0.006555	0.007463	0.028703	0.009911	0.22	0.041585	0.014555	0.103066	0
Sacramento	2025	T6 CAIRP heavy	Aggregate	70	Diesel	6068.041	6068.041	0	0.383164	0.007516	0.007855	1046.686	0.000305	0.164906	0.006568	0.007477	0.028812	0.009911	0.22	0.041585	0.014555	0.103066	0
Sacramento	2025	T6 CAIRP heavy	Aggregate	75	Diesel	1058.574	1058.574	0	0.383373	0.007516	0.007855	1046.686	0.000306	0.164906	0.006584	0.007496	0.028962	0.009911	0.22	0.041585	0.014555	0.103066	0
Sacramento	2025	T6 CAIRP heavy	Aggregate	80	Diesel	44.85813	44.85813	0	0.383333	0.007516	0.007855	1046.686	0.000307	0.164906	0.006604	0.007518	0.029152	0.009911	0.22	0.041585	0.014555	0.103066	0
Sacramento	2025	T6 CAIRP heavy	Aggregate	85	Diesel	5.282815	5.282815	0	0.383203	0.007516	0.007855	1046.686	0.000308	0.164906	0.006626	0.007544	0.029382	0.009911	0.22	0.041585	0.014555	0.103066	0
Sacramento	2025	T6 CAIRP heavy	Aggregate	90	Diesel	0.006636	0.006636	0	0.380571	0.007516	0.007855	1046.686	0.000309	0.164906	0.006652	0.007573	0.029653	0.009911	0.22	0.041585	0.014555	0.103066	0
Sacramento	2025	T6 CAIRP small	Aggregate	10	Diesel	18.96676	18.96676	0	1.504078	0.008548	0.008935	1912.604	0.002367	0.301332	0.050956	0.058009	0.188318	0.018111	0.219284	0.061496	0.021524	0.188332	0
Sacramento	2025	T6 CAIRP small	Aggregate	15	Diesel	52.20951	52.20951	0	1.000451	0.00565	0.005906	1501.999	0.001098	0.236641	0.023639	0.026912	0.11474	0.014223	0.219284	0.061496	0.021524	0.1479	0
Sacramento	2025	T6 CAIRP small	Aggregate	20	Diesel	64.93524	64.93524	0	0.766544	0.003826	0.003999	1280.556	0.000565	0.201752	0.012169	0.013853	0.081393	0.012126	0.219284	0.06063	0.021221	0.126095	0
Sacramento	2025	T6 CAIRP small	Aggregate	25	Diesel	58.87399	58.87399	0	0.602557	0.003005	0.003141	1161.176	0.00041	0.182944	0.008829	0.010051	0.066256	0.010996	0.219284	0.049809	0.017433	0.11434	0
Sacramento	2025	T6 CAIRP small	Aggregate	30	Diesel	59.04223	59.04223	0	0.462992	0.002602	0.002719	1077.517	0.000325	0.169763	0.006997	0.007966	0.055527	0.010203	0.219284	0.044399	0.01554	0.106102	0
Sacramento	2025	T6 CAIRP small	Aggregate	35	Diesel	66.97089	66.97089	0	0.354406	0.002493	0.002605	1016.552	0.000264	0.160158	0.005678	0.006464	0.046579	0.009626	0.219284	0.041585	0.014555	0.100099	0
Sacramento	2025	T6 CAIRP small	Aggregate	40	Diesel	91.49159	91.49159	0	0.27673	0.002678	0.002799	978.2685	0.000226	0.154127	0.004869	0.005543	0.039408	0.009264	0.219284	0.041585	0.014555	0.096329	0
Sacramento	2025	T6 CAIRP small	Aggregate	45	Diesel	100.0022	100.0022	0	0.229878	0.003159	0.003301	962.6603	0.000216	0.151668	0.004568	0.005201	0.034007	0.009116	0.219284	0.041585	0.014555	0.094792	0
Sacramento	2025	T6 CAIRP small	Aggregate	50	Diesel	123.3253	123.3253	0	0.214018	0.003936	0.004114	969.723	0.000222	0.15278	0.004772	0.005432	0.030379	0.009183	0.219284	0.041585	0.014555	0.095488	0
Sacramento	2025	T6 CAIRP small	Aggregate	55	Diesel	196.1387	196.1387	0	0.229196	0.005012	0.005238	999.4539	0.000254	0.157464	0.005474	0.006232	0.028525	0.009464	0.219284	0.041585	0.014555	0.098415	0
Sacramento	2025	T6 CAIRP small	Aggregate	60	Diesel	624.2494	624.2494	0	0.274776	0.006274	0.006557	1051.858	0.000301	0.165721	0.006489	0.007387	0.028397	0.00996	0.219284	0.041585	0.014555	0.103575	0
Sacramento	2025	T6 CAIRP small	Aggregate	65	Diesel	1193.425	1193.425	0	0.350303	0.007661	0.008007	1126.898											

Sacramento	2025	T6 instate heavy	Aggregate	75	Diesel	692.514	692.514	0	0.755311	0.010955	0.011451	1096.21	0.000467	0.172708	0.010049	0.011444	0.039441	0.01038	0.219914	0.041585	0.014555	0.107943	0
Sacramento	2025	T6 instate heavy	Aggregate	80	Diesel	21.20733	21.20733	0	0.756784	0.010954	0.01145	1096.11	0.000468	0.172693	0.010081	0.011476	0.039724	0.01038	0.219914	0.041585	0.014555	0.107933	0
Sacramento	2025	T6 instate small	Aggregate	10	Diesel	8566.523	8566.523	0	2.242628	0.028554	0.029845	1986.451	0.005973	0.312966	0.12859	0.14639	0.32614	0.018811	0.216802	0.061496	0.021524	0.195604	0
Sacramento	2025	T6 instate small	Aggregate	15	Diesel	16748.72	16748.72	0	1.540007	0.018456	0.019291	1561.131	0.002991	0.245957	0.064386	0.073299	0.209125	0.014783	0.216772	0.061496	0.021524	0.153723	0
Sacramento	2025	T6 instate small	Aggregate	20	Diesel	23279.04	23279.04	0	1.205256	0.011643	0.012169	1330.3	0.001441	0.209589	0.031022	0.035316	0.149485	0.012597	0.216752	0.06063	0.021221	0.130993	0
Sacramento	2025	T6 instate small	Aggregate	25	Diesel	31892.95	31892.95	0	0.978004	0.008834	0.009233	1201.93	0.001017	0.189365	0.021906	0.024938	0.119585	0.011382	0.216773	0.049809	0.017433	0.118353	0
Sacramento	2025	T6 instate small	Aggregate	30	Diesel	44197.17	44197.17	0	0.78319	0.007284	0.007613	1110.494	0.000795	0.174959	0.017113	0.019481	0.098179	0.010516	0.216814	0.044399	0.01554	0.109349	0
Sacramento	2025	T6 instate small	Aggregate	35	Diesel	53792.62	53792.62	0	0.632488	0.006365	0.006653	1043.546	0.000631	0.164411	0.013579	0.015459	0.080435	0.009882	0.216863	0.041585	0.014555	0.102757	0
Sacramento	2025	T6 instate small	Aggregate	40	Diesel	41542.39	41542.39	0	0.530056	0.006107	0.006383	1000.446	0.000528	0.157621	0.011369	0.012942	0.066737	0.009474	0.216871	0.041585	0.014555	0.098513	0
Sacramento	2025	T6 instate small	Aggregate	45	Diesel	21036.09	21036.09	0	0.464876	0.006403	0.006692	982.6426	0.000475	0.154816	0.010228	0.011643	0.056021	0.009305	0.216955	0.041585	0.014555	0.09867	0
Sacramento	2025	T6 instate small	Aggregate	50	Diesel	12295.42	12295.42	0	0.443524	0.007302	0.007632	989.144	0.000476	0.15584	0.010254	0.011674	0.048957	0.009367	0.217033	0.041585	0.014555	0.0974	0
Sacramento	2025	T6 instate small	Aggregate	55	Diesel	14087.11	14087.11	0	0.469105	0.008828	0.009227	1019.211	0.000532	0.160577	0.011452	0.013037	0.045654	0.009651	0.217063	0.041585	0.014555	0.100361	0
Sacramento	2025	T6 instate small	Aggregate	60	Diesel	20964.59	20964.59	0	0.531119	0.010438	0.01091	1074.06	0.000599	0.169219	0.0129	0.014686	0.045335	0.010171	0.217128	0.041585	0.014555	0.105762	0
Sacramento	2025	T6 instate small	Aggregate	65	Diesel	26982.78	26982.78	0	0.632863	0.011953	0.012493	1152.828	0.000656	0.181629	0.014114	0.016068	0.047291	0.010917	0.217183	0.041585	0.014555	0.113518	0
Sacramento	2025	T6 instate small	Aggregate	70	Diesel	20178.63	20178.63	0	0.631424	0.01194	0.01248	1152.996	0.000655	0.181655	0.014107	0.01606	0.047341	0.010918	0.217193	0.041585	0.014555	0.113534	0
Sacramento	2025	T6 instate small	Aggregate	75	Diesel	2149.875	2149.875	0	0.631838	0.011943	0.012483	1152.96	0.000656	0.181649	0.014128	0.016083	0.047508	0.010918	0.217191	0.041585	0.014555	0.113531	0
Sacramento	2025	T6 instate small	Aggregate	80	Diesel	65.36006	65.36006	0	0.631874	0.011925	0.012464	1153.185	0.000656	0.181685	0.01412	0.016075	0.047618	0.01092	0.217204	0.041585	0.014555	0.113553	0
Sacramento	2025	T6 OOS heavy	Aggregate	10	Diesel	42.70063	42.70063	0	1.702879	0.003227	0.003372	1790.62	0.001528	0.282113	0.032896	0.037449	0.194241	0.016956	0.22	0.061496	0.021524	0.176321	0
Sacramento	2025	T6 OOS heavy	Aggregate	15	Diesel	117.5414	117.5414	0	1.15452	0.002348	0.002454	1406.14	0.000666	0.221538	0.014333	0.016318	0.112876	0.013315	0.22	0.061496	0.021524	0.138461	0
Sacramento	2025	T6 OOS heavy	Aggregate	20	Diesel	146.1913	146.1913	0	0.896721	0.001902	0.001988	1199.137	0.000388	0.188925	0.008363	0.009521	0.078972	0.011355	0.22	0.06063	0.021221	0.118078	0
Sacramento	2025	T6 OOS heavy	Aggregate	25	Diesel	132.5454	132.5454	0	0.697527	0.001615	0.001688	1085.595	0.000292	0.171036	0.006294	0.007166	0.064058	0.01028	0.22	0.049809	0.017433	0.106897	0
Sacramento	2025	T6 OOS heavy	Aggregate	30	Diesel	132.9242	132.9242	0	0.525305	0.001541	0.00161	1003.279	0.000234	0.158067	0.005042	0.00574	0.053325	0.0095	0.22	0.044399	0.01554	0.098792	0
Sacramento	2025	T6 OOS heavy	Aggregate	35	Diesel	150.7743	150.7743	0	0.39176	0.001702	0.001779	942.8735	0.000193	0.14855	0.004616	0.004736	0.04442	0.008928	0.22	0.041585	0.014555	0.092844	0
Sacramento	2025	T6 OOS heavy	Aggregate	40	Diesel	205.9787	205.9787	0	0.296814	0.0021	0.002194	904.2326	0.000169	0.142462	0.003648	0.004153	0.037333	0.008563	0.22	0.041585	0.014555	0.098939	0
Sacramento	2025	T6 OOS heavy	Aggregate	45	Diesel	225.1391	225.1391	0	0.240373	0.002733	0.002857	887.2175	0.000163	0.139781	0.003503	0.003988	0.032056	0.008401	0.22	0.041585	0.014555	0.087363	0
Sacramento	2025	T6 OOS heavy	Aggregate	50	Diesel	277.6472	277.6472	0	0.222614	0.003603	0.003765	891.6928	0.000173	0.140487	0.003723	0.004239	0.028585	0.008444	0.22	0.041585	0.014555	0.087804	0
Sacramento	2025	T6 OOS heavy	Aggregate	55	Diesel	441.575	441.575	0	0.243584	0.004708	0.004921	919.0852	0.0002	0.144802	0.004309	0.004906	0.026915	0.008703	0.22	0.041585	0.014555	0.090501	0
Sacramento	2025	T6 OOS heavy	Aggregate	60	Diesel	1405.398	1405.398	0	0.303343	0.00605	0.006323	967.9066	0.000244	0.152494	0.005262	0.005099	0.027054	0.009165	0.22	0.041585	0.014555	0.095309	0
Sacramento	2025	T6 OOS heavy	Aggregate	65	Diesel	2686.807	2686.807	0	0.401506	0.007627	0.007972	1038.15	0.000306	0.163561	0.006579	0.00749	0.028995	0.009831	0.22	0.041585	0.014555	0.102226	0
Sacramento	2025	T6 OOS heavy	Aggregate	70	Diesel	3589.77	3589.77	0	0.401351	0.007627	0.007972	1038.15	0.000306	0.163561	0.006594	0.007507	0.029121	0.009831	0.22	0.041585	0.014555	0.102226	0
Sacramento	2025	T6 OOS heavy	Aggregate	75	Diesel	626.2378	626.2378	0	0.401569	0.007627	0.007972	1038.15	0.000307	0.163561	0.006613	0.007528	0.029293	0.009831	0.22	0.041585	0.014555	0.102226	0
Sacramento	2025	T6 OOS heavy	Aggregate	80	Diesel	26.53746	26.53746	0	0.401527	0.007627	0.007972	1038.15	0.000308	0.163561	0.006635	0.007554	0.029512	0.009831	0.22	0.041585	0.014555	0.102226	0
Sacramento	2025	T6 OOS heavy	Aggregate	85	Diesel	3.125241	3.125241	0	0.401391	0.007627	0.007972	1038.15	0.000309	0.163561	0.006661	0.007584	0.029778	0.009831	0.22	0.041585	0.014555	0.102226	0
Sacramento	2025	T6 OOS heavy	Aggregate	90	Diesel	0.003926	0.003926	0	0.398635	0.007627	0.007972	1038.15	0.000311	0.163561	0.006691	0.007617	0.03009	0.009831	0.22	0.041585	0.014555	0.102226	0
Sacramento	2025	T6 OOS small	Aggregate	10	Diesel	9.758206	9.758206	0	1.604515	0.013768	0.014391	1887.687	0.003286	0.297406	0.070743	0.080536	0.212131	0.017875	0.218619	0.061496	0.021524	0.185879	0
Sacramento	2025	T6 OOS small	Aggregate	15	Diesel	26.86127	26.86127	0	1.067005	0.008934	0.009338	1482.71	0.001572	0.233602	0.033843	0.038528	0.132655	0.01404	0.218619	0.061496	0.021524	0.146001	0
Sacramento	2025	T6 OOS small	Aggregate	20	Diesel	33.40853	33.40853	0	0.817193	0.005796	0.006058	1263.913	0.000777	0.19913	0.016724	0.019039	0.094579	0.011969	0.218619	0.06063	0.021221	0.124456	0
Sacramento	2025	T6 OOS small	Aggregate	25	Diesel	30.29007	30.29007	0	0.650158	0.004467	0.004669	1145.965	0.000556	0.180547	0.011974	0.013632	0.07677	0.010852	0.218619	0.049809	0.017433	0.112842	0
Sacramento	2025	T6 OOS small	Aggregate	30	Diesel	30.37663	30.37663	0	0.508977	0.003768	0.003939	1063.368	0.000439	0.167534	0.009449	0.010757	0.064203	0.010069	0.218619	0.044399	0.01554	0.104709	0
Sacramento	2025	T6 OOS small	Aggregate	35	Diesel	34.45585	34.45585	0	0.399276	0.003442	0.003597	1003.141	0.000353	0.158045	0.007609	0.008662	0.053719	0.009499	0.218619	0.041585	0.014555	0.098778	0
Sacramento	2025	T6 OOS small	Aggregate	40	Diesel	47.0715	47.0715	0	0.320981	0.003488	0.003645	965.2716	0.0003	0.152079	0.006452	0.007345	0.045311	0.009141	0.218619	0.041585	0.014555	0.095049	0
Sacramento	2025	T6 OOS small	Aggregate	45	Diesel	51.45015	51.45015	0	0.273989	0.003907	0.004084	949.7529	0.000277	0.149634	0.005973	0.0068	0.038979	0.008994	0.218619	0.041585	0.014555	0.093521	0
Sacramento	2025	T6 OOS small	Aggregate	50	Diesel	63.44962	63.44962	0	0.258498	0.004704	0.004916	956.5801	0.000286	0.15071	0.006167	0.00702	0.034725	0.009058	0.218619	0.041585	0.014555	0.094193	0
Sacramento	2025	T6 OOS small	Aggregate	55	Diesel	100.9114	100.9114	0	0.274567	0.00588	0.006146	985.7505	0.000326	0.155305	0.007023	0.007996	0.032555	0.009334	0.218619	0.041585	0.014555	0.097066	0
Sacramento	2025	T6 OOS small	Aggregate	60	Diesel	321.17	321.17	0	0.320929	0.007219	0.007545	1037.253	0.00038	0.16342	0.008181	0.009314	0.032375	0.009822	0.218619	0.041585	0.014555	0.102137	0
Sacramento	2025	T6 OOS small	Aggregate	65	Diesel	614.0053	614.0053	0	0.396968	0.008604	0.008994	1111.022	0.000435	0.175042	0.009355	0.01065	0.033746	0.010521	0.218619	0.041585	0.014555	0.109401	0
Sacramento	2025	T6 OOS small	Aggregate	70	Diesel	820.3559	820.3559	0	0.396814	0.008604	0.008994	1111.022	0										

Sacramento	2025	T6 Public	Aggregate	75	Diesel	816.1241	816.1241	0	3.916473	0.021839	0.022827	1083.266	0.001276	0.170669	0.027466	0.031268	0.078052	0.010258	0.148257	0.041585	0.014555	0.106668	0
Sacramento	2025	T6 Utility	Aggregate	5	Diesel	33.93096	33.93096	0	1.897743	0.003381	0.003534	2317.999	0.002522	0.365202	0.054294	0.061809	0.279394	0.02195	0.22	0.061496	0.021524	0.228251	0
Sacramento	2025	T6 Utility	Aggregate	10	Diesel	121.9015	121.9015	0	1.420958	0.002677	0.002798	1914.417	0.001349	0.301617	0.029044	0.033064	0.179606	0.018128	0.22	0.061496	0.021524	0.188511	0
Sacramento	2025	T6 Utility	Aggregate	15	Diesel	129.7112	129.7112	0	0.990288	0.001968	0.002057	1504.265	0.000627	0.236998	0.0135	0.015369	0.103081	0.014244	0.22	0.061496	0.021524	0.148123	0
Sacramento	2025	T6 Utility	Aggregate	20	Diesel	109.3199	109.3199	0	0.783227	0.001604	0.001677	1283.219	0.000383	0.202172	0.008238	0.009378	0.071447	0.012151	0.22	0.06063	0.021221	0.126357	0
Sacramento	2025	T6 Utility	Aggregate	25	Diesel	130.1168	130.1168	0	0.615267	0.001381	0.001443	1158.37	0.000291	0.182502	0.006262	0.007129	0.057128	0.010969	0.22	0.049809	0.017433	0.114064	0
Sacramento	2025	T6 Utility	Aggregate	30	Diesel	168.6083	168.6083	0	0.468518	0.001337	0.001398	1068.184	0.000233	0.168293	0.005013	0.005707	0.046697	0.010115	0.22	0.044399	0.01554	0.105183	0
Sacramento	2025	T6 Utility	Aggregate	35	Diesel	205.686	205.686	0	0.355571	0.001491	0.001559	1001.811	0.000191	0.157836	0.004118	0.004688	0.038118	0.009487	0.22	0.041585	0.014555	0.098647	0
Sacramento	2025	T6 Utility	Aggregate	40	Diesel	270.8089	270.8089	0	0.276332	0.001842	0.001926	959.2006	0.000166	0.151122	0.003572	0.004066	0.031366	0.009083	0.22	0.041585	0.014555	0.094452	0
Sacramento	2025	T6 Utility	Aggregate	45	Diesel	278.5674	278.5674	0	0.23068	0.00239	0.002498	940.3225	0.000157	0.148148	0.00337	0.003836	0.02642	0.008904	0.22	0.041585	0.014555	0.092593	0
Sacramento	2025	T6 Utility	Aggregate	50	Diesel	257.9213	257.9213	0	0.21854	0.003135	0.003277	945.1578	0.000163	0.14891	0.003508	0.003994	0.023266	0.00895	0.22	0.041585	0.014555	0.093069	0
Sacramento	2025	T6 Utility	Aggregate	55	Diesel	401.1848	401.1848	0	0.240082	0.004077	0.004262	973.6936	0.000185	0.153406	0.003985	0.004536	0.021894	0.00922	0.22	0.041585	0.014555	0.095879	0
Sacramento	2025	T6 Utility	Aggregate	60	Diesel	270.8684	270.8684	0	0.29536	0.005217	0.005453	1026.035	0.000223	0.161652	0.004804	0.005469	0.022323	0.009716	0.22	0.041585	0.014555	0.101033	0
Sacramento	2025	T6 Utility	Aggregate	65	Diesel	2.051518	2.051518	0	0.385466	0.006554	0.006851	1102.156	0.000277	0.173645	0.005963	0.006788	0.024538	0.010437	0.22	0.041585	0.014555	0.108528	0
Sacramento	2025	T6 Utility	Aggregate	70	Diesel	0.000363	0.000363	0	0.384439	0.006554	0.006851	1102.156	0.000278	0.173645	0.005977	0.006804	0.024655	0.010437	0.22	0.041585	0.014555	0.108528	0
Sacramento	2025	T7 CAIRP	Aggregate	10	Diesel	788.6919	788.6919	0	7.812852	0.009113	0.009525	2532.603	0.003065	0.399013	0.065979	0.075112	0.679386	0.023982	0.22	0.137416	0.048096	0.249383	0
Sacramento	2025	T7 CAIRP	Aggregate	15	Diesel	2171.02	2171.02	0	5.074626	0.007254	0.007582	2088.567	0.001467	0.329055	0.031584	0.035955	0.370583	0.019777	0.22	0.135591	0.047457	0.205659	0
Sacramento	2025	T7 CAIRP	Aggregate	20	Diesel	2700.193	2700.193	0	3.823222	0.006251	0.006533	1839.594	0.000905	0.289829	0.019479	0.022175	0.248499	0.01742	0.22	0.132648	0.046427	0.181143	0
Sacramento	2025	T7 CAIRP	Aggregate	25	Diesel	2448.148	2448.148	0	2.940166	0.005674	0.005831	1690.235	0.000701	0.266297	0.015084	0.017172	0.193803	0.016006	0.22	0.129705	0.045397	0.166436	0
Sacramento	2025	T7 CAIRP	Aggregate	30	Diesel	2455.144	2455.144	0	2.190091	0.005996	0.006267	1575.14	0.000573	0.248164	0.012335	0.014042	0.152697	0.014916	0.22	0.12788	0.044758	0.155102	0
Sacramento	2025	T7 CAIRP	Aggregate	35	Diesel	2784.841	2784.841	0	1.601752	0.007288	0.007617	1487.083	0.000478	0.23429	0.010289	0.011714	0.117746	0.014082	0.22	0.10823	0.03788	0.146432	0
Sacramento	2025	T7 CAIRP	Aggregate	40	Diesel	3804.481	3804.481	0	1.174891	0.009551	0.009982	1425.888	0.000415	0.224649	0.008943	0.01018	0.08893	0.013502	0.22	0.093991	0.032897	0.140406	0
Sacramento	2025	T7 CAIRP	Aggregate	45	Diesel	4158.379	4158.379	0	0.909198	0.012784	0.013362	1391.386	0.000385	0.219213	0.008291	0.009439	0.066233	0.013176	0.22	0.079751	0.027913	0.137008	0
Sacramento	2025	T7 CAIRP	Aggregate	50	Diesel	5128.218	5128.218	0	0.805374	0.016987	0.017755	1383.411	0.000387	0.217957	0.008333	0.009486	0.049643	0.0131	0.22	0.069499	0.024325	0.136223	0
Sacramento	2025	T7 CAIRP	Aggregate	55	Diesel	8156.007	8156.007	0	0.86358	0.022161	0.023163	1404.173	0.000421	0.221228	0.009066	0.01032	0.039152	0.013297	0.22	0.069499	0.024325	0.138267	0
Sacramento	2025	T7 CAIRP	Aggregate	60	Diesel	25958.07	25958.07	0	1.083908	0.028306	0.029586	1451.33	0.000487	0.228658	0.010493	0.011946	0.034777	0.013743	0.22	0.069499	0.024325	0.142911	0
Sacramento	2025	T7 CAIRP	Aggregate	65	Diesel	49626.03	49626.03	0	1.465057	0.035421	0.037023	1524.877	0.000586	0.240245	0.012612	0.014358	0.036503	0.01444	0.22	0.069499	0.024325	0.150153	0
Sacramento	2025	T7 CAIRP	Aggregate	70	Diesel	66304	66304	0	1.464488	0.035421	0.037023	1524.877	0.000586	0.240245	0.012627	0.014374	0.036638	0.01444	0.22	0.069499	0.024325	0.150153	0
Sacramento	2025	T7 CAIRP	Aggregate	75	Diesel	11566.78	11566.78	0	1.465286	0.035421	0.037023	1524.877	0.000587	0.240245	0.012644	0.014395	0.036823	0.01444	0.22	0.069499	0.024325	0.150153	0
Sacramento	2025	T7 CAIRP	Aggregate	80	Diesel	490.1538	490.1538	0	1.465133	0.035421	0.037023	1524.877	0.000588	0.240245	0.012666	0.014419	0.037058	0.01444	0.22	0.069499	0.024325	0.150153	0
Sacramento	2025	T7 CAIRP	Aggregate	85	Diesel	57.72403	57.72403	0	1.464637	0.035421	0.037023	1524.877	0.000589	0.240245	0.012691	0.014447	0.037343	0.01444	0.22	0.069499	0.024325	0.150153	0
Sacramento	2025	T7 CAIRP	Aggregate	90	Diesel	0.07251	0.07251	0	1.454578	0.035421	0.037023	1524.877	0.000591	0.240245	0.012719	0.01448	0.037678	0.01444	0.22	0.069499	0.024325	0.150153	0
Sacramento	2025	T7 NNOOS	Aggregate	10	Diesel	934.9104	934.9104	0	7.788923	0.008844	0.009243	2446.3	0.002963	0.385416	0.063794	0.072625	0.637764	0.023165	0.22	0.137393	0.048088	0.240885	0
Sacramento	2025	T7 NNOOS	Aggregate	15	Diesel	2573.514	2573.514	0	5.048834	0.006938	0.007252	2019.102	0.001404	0.31811	0.030235	0.03442	0.34744	0.01912	0.22	0.135569	0.047449	0.198819	0
Sacramento	2025	T7 NNOOS	Aggregate	20	Diesel	3200.791	3200.791	0	3.79813	0.005918	0.006186	1779.395	0.00086	0.280344	0.018524	0.021088	0.2328	0.01685	0.22	0.132626	0.046419	0.175215	0
Sacramento	2025	T7 NNOOS	Aggregate	25	Diesel	2902.02	2902.02	0	2.919048	0.005277	0.005516	1636.815	0.000663	0.257881	0.014275	0.016251	0.181514	0.0155	0.22	0.129684	0.045389	0.161176	0
Sacramento	2025	T7 NNOOS	Aggregate	30	Diesel	2910.312	2910.312	0	2.17293	0.00551	0.00576	1528.522	0.000564	0.240819	0.011622	0.013231	0.142954	0.014474	0.22	0.127859	0.044751	0.150512	0
Sacramento	2025	T7 NNOOS	Aggregate	35	Diesel	3301.132	3301.132	0	1.587371	0.006708	0.007012	1446.063	0.000449	0.227828	0.009666	0.011004	0.110125	0.013693	0.22	0.108212	0.037874	0.142392	0
Sacramento	2025	T7 NNOOS	Aggregate	40	Diesel	4509.808	4509.808	0	1.162125	0.008871	0.009272	1389.319	0.00039	0.218888	0.008404	0.009567	0.083012	0.013156	0.22	0.093975	0.032891	0.136805	0
Sacramento	2025	T7 NNOOS	Aggregate	45	Diesel	4929.316	4929.316	0	0.89689	0.011998	0.01254	1358.18	0.000364	0.213982	0.007832	0.008916	0.061601	0.012861	0.22	0.079738	0.027908	0.133739	0
Sacramento	2025	T7 NNOOS	Aggregate	50	Diesel	6078.957	6078.957	0	0.79236	0.016089	0.016816	1352.536	0.000369	0.213093	0.007948	0.009048	0.045884	0.012808	0.22	0.069487	0.02432	0.133183	0
Sacramento	2025	T7 NNOOS	Aggregate	55	Diesel	9668.079	9668.079	0	0.848697	0.021145	0.022101	1373.766	0.000407	0.216437	0.008752	0.009963	0.035853	0.013009	0.22	0.069487	0.02432	0.135273	0
Sacramento	2025	T7 NNOOS	Aggregate	60	Diesel	30770.53	30770.53	0	1.065971	0.027165	0.028393	1420.411	0.000476	0.223786	0.010246	0.011664	0.031521	0.01345	0.22	0.069487	0.02432	0.139866	0
Sacramento	2025	T7 NNOOS	Aggregate	65	Diesel	58826.38	58826.38	0	1.442911	0.03415	0.035694	1492.464	0.000577	0.235138	0.012427	0.014147	0.032878	0.014133	0.22	0.069487	0.02432	0.146961	0
Sacramento	2025	T7 NNOOS	Aggregate	70	Diesel	78596.34	78596.34	0	1.442351	0.03415	0.035694	1492.464	0.000578	0.235138	0.012439	0.014161	0.032992	0.014133	0.22	0.069487	0.02432	0.146961	0
Sacramento	2025	T7 NNOOS	Aggregate	75	Diesel	13711.19	13711.19	0	1.443136	0.03415	0.035694	1492.464	0.000578	0.235138	0.012454	0.014178	0.033149	0.014133	0.22	0.069487	0.02432	0.146961	0
Sacramento	2025	T7 NNOOS	Aggregate	80	Diesel	581.0252	581.0252	0	1.442986	0.03415	0.035694	1492.464	0.000579	0.235138	0.012473	0.014199	0.033348	0.014133	0.22	0.069487	0.02432	0.146961	0
Sacramento																							

Sacramento	2025	T7 NOOS	Aggregate	90	Diesel	0.031253	0.031253	0	1.50088	0.036458	0.038107	1509.892	0.000606	0.237884	0.013037	0.014842	0.03865	0.014298	0.22	0.069509	0.024328	0.148678	0
Sacramento	2025	T7 Other Port	Aggregate	10	Diesel	29.62786	29.62786	0	7.294236	0.007852	0.008207	2801.768	0.00277	0.44142	0.059648	0.067904	0.724382	0.026531	0.22	0.137166	0.048008	0.275887	0
Sacramento	2025	T7 Other Port	Aggregate	15	Diesel	73.41374	73.41374	0	4.790031	0.006483	0.006776	2300.486	0.001348	0.362443	0.029026	0.033044	0.395479	0.021784	0.22	0.135345	0.047371	0.226527	0
Sacramento	2025	T7 Other Port	Aggregate	20	Diesel	96.30774	96.30774	0	3.637366	0.005722	0.005981	2020.62	0.000841	0.318349	0.018106	0.020612	0.265461	0.019134	0.22	0.132407	0.046342	0.198968	0
Sacramento	2025	T7 Other Port	Aggregate	25	Diesel	96.6365	96.6365	0	2.80384	0.005422	0.005667	1846.884	0.00066	0.290977	0.014219	0.016187	0.207044	0.017489	0.22	0.129469	0.045314	0.181861	0
Sacramento	2025	T7 Other Port	Aggregate	30	Diesel	98.02006	98.02006	0	2.09159	0.00589	0.006156	1713.192	0.000548	0.269914	0.011796	0.013429	0.163157	0.016223	0.22	0.127648	0.044677	0.168696	0
Sacramento	2025	T7 Other Port	Aggregate	35	Diesel	109.3334	109.3334	0	1.534724	0.007142	0.007465	1610.223	0.000462	0.253691	0.009945	0.011321	0.126002	0.015248	0.22	0.108032	0.037811	0.158557	0
Sacramento	2025	T7 Other Port	Aggregate	40	Diesel	127.6802	127.6802	0	1.133037	0.009178	0.009593	1537.978	0.000402	0.242309	0.008664	0.008963	0.095578	0.014564	0.22	0.093818	0.032836	0.151443	0
Sacramento	2025	T7 Other Port	Aggregate	45	Diesel	148.2626	148.2626	0	0.886342	0.011998	0.012541	1496.456	0.000369	0.235767	0.007954	0.009055	0.071886	0.014171	0.22	0.079604	0.027861	0.147355	0
Sacramento	2025	T7 Other Port	Aggregate	50	Diesel	166.6646	166.6646	0	0.794778	0.015603	0.016308	1485.658	0.000363	0.234066	0.007815	0.008897	0.054926	0.014068	0.22	0.069369	0.024279	0.146291	0
Sacramento	2025	T7 Other Port	Aggregate	55	Diesel	210.9428	210.9428	0	0.858283	0.019991	0.020895	1505.583	0.000383	0.237205	0.008247	0.009389	0.044697	0.014257	0.22	0.069369	0.024279	0.148253	0
Sacramento	2025	T7 Other Port	Aggregate	60	Diesel	296.0539	296.0539	0	1.077052	0.025163	0.0263	1556.231	0.00043	0.245185	0.00925	0.01053	0.041199	0.014737	0.22	0.069369	0.024279	0.15324	0
Sacramento	2025	T7 Other Port	Aggregate	65	Diesel	368.6713	368.6713	0	1.451288	0.031119	0.032526	1637.602	0.000503	0.258005	0.010823	0.012321	0.044433	0.015507	0.22	0.069369	0.024279	0.161253	0
Sacramento	2025	T7 Other Port	Aggregate	70	Diesel	244.1399	244.1399	0	1.452638	0.031119	0.032526	1637.602	0.000504	0.258005	0.010854	0.012357	0.044727	0.015507	0.22	0.069369	0.024279	0.161253	0
Sacramento	2025	T7 Other Port	Aggregate	75	Diesel	25.83591	25.83591	0	1.456843	0.031119	0.032526	1637.602	0.000506	0.258005	0.010893	0.012401	0.045129	0.015507	0.22	0.069369	0.024279	0.161253	0
Sacramento	2025	T7 Other Port	Aggregate	80	Diesel	0.591478	0.591478	0	1.457977	0.031119	0.032526	1637.602	0.000508	0.258005	0.01094	0.012454	0.04564	0.015507	0.22	0.069369	0.024279	0.161253	0
Sacramento	2025	T7 Other Port	Aggregate	85	Diesel	0.005661	0.005661	0	1.455611	0.031119	0.032526	1637.602	0.000511	0.258005	0.010994	0.012516	0.046259	0.015507	0.22	0.069369	0.024279	0.161253	0
Sacramento	2025	T7 POAK	Aggregate	10	Diesel	52.60849	52.60849	0	7.409701	0.007898	0.008255	2819.029	0.002823	0.444139	0.060789	0.069203	0.753103	0.026695	0.22	0.137157	0.048005	0.277587	0
Sacramento	2025	T7 POAK	Aggregate	15	Diesel	130.3566	130.3566	0	4.909078	0.006497	0.00679	2310.04	0.001385	0.363948	0.029823	0.033951	0.410849	0.021875	0.22	0.135335	0.047367	0.227467	0
Sacramento	2025	T7 POAK	Aggregate	20	Diesel	171.0081	171.0081	0	3.751631	0.005718	0.005976	2026.423	0.000869	0.319264	0.018711	0.021301	0.275641	0.019189	0.22	0.132398	0.046339	0.19954	0
Sacramento	2025	T7 POAK	Aggregate	25	Diesel	171.5919	171.5919	0	2.898358	0.00541	0.005655	1848.508	0.000682	0.291233	0.014686	0.016719	0.214609	0.017504	0.22	0.12946	0.045311	0.182021	0
Sacramento	2025	T7 POAK	Aggregate	30	Diesel	174.0486	174.0486	0	2.166358	0.005872	0.006138	1710.93	0.000565	0.269558	0.012154	0.013836	0.168734	0.016201	0.22	0.127639	0.044674	0.168474	0
Sacramento	2025	T7 POAK	Aggregate	35	Diesel	194.137	194.137	0	1.595434	0.007121	0.007443	1605.031	0.000475	0.252873	0.010224	0.011639	0.130041	0.015199	0.22	0.108025	0.037809	0.158046	0
Sacramento	2025	T7 POAK	Aggregate	40	Diesel	226.7144	226.7144	0	1.185374	0.009156	0.00957	1530.813	0.000413	0.24118	0.008898	0.010129	0.098529	0.014496	0.22	0.093811	0.032834	0.150738	0
Sacramento	2025	T7 POAK	Aggregate	45	Diesel	263.2614	263.2614	0	0.935986	0.011977	0.012518	1488.276	0.00038	0.234478	0.008174	0.009306	0.074198	0.014093	0.22	0.079598	0.027859	0.146549	0
Sacramento	2025	T7 POAK	Aggregate	50	Diesel	295.9368	295.9368	0	0.847411	0.015584	0.016289	1477.418	0.000374	0.232768	0.008053	0.009168	0.057047	0.01399	0.22	0.069364	0.024278	0.14548	0
Sacramento	2025	T7 POAK	Aggregate	55	Diesel	374.5589	374.5589	0	0.919584	0.019978	0.020881	1498.241	0.000396	0.236049	0.008536	0.009717	0.047078	0.014187	0.22	0.069364	0.024278	0.14753	0
Sacramento	2025	T7 POAK	Aggregate	60	Diesel	525.6858	525.6858	0	1.152713	0.025158	0.026296	1550.745	0.000447	0.24432	0.009621	0.010953	0.044429	0.014685	0.22	0.069364	0.024278	0.1527	0
Sacramento	2025	T7 POAK	Aggregate	65	Diesel	654.6283	654.6283	0	1.547015	0.031125	0.032532	1634.928	0.000525	0.257584	0.011309	0.012874	0.048682	0.015482	0.22	0.069364	0.024278	0.16099	0
Sacramento	2025	T7 POAK	Aggregate	70	Diesel	433.5051	433.5051	0	1.548453	0.031125	0.032532	1634.928	0.000527	0.257584	0.011355	0.012927	0.049119	0.015482	0.22	0.069364	0.024278	0.16099	0
Sacramento	2025	T7 POAK	Aggregate	75	Diesel	45.87534	45.87534	0	1.552936	0.031125	0.032532	1634.928	0.00053	0.257584	0.011413	0.012993	0.049718	0.015482	0.22	0.069364	0.024278	0.16099	0
Sacramento	2025	T7 POAK	Aggregate	80	Diesel	1.050253	1.050253	0	1.554145	0.031125	0.032532	1634.928	0.000533	0.257584	0.011482	0.013072	0.050478	0.015482	0.22	0.069364	0.024278	0.16099	0
Sacramento	2025	T7 POAK	Aggregate	85	Diesel	0.010052	0.010052	0	1.551623	0.031125	0.032532	1634.928	0.000537	0.257584	0.011563	0.013164	0.051399	0.015482	0.22	0.069364	0.024278	0.16099	0
Sacramento	2025	T7 Public	Aggregate	5	Diesel	6168.693	6168.693	0	18.51028	0.111322	0.116355	3438.233	0.027396	0.541695	0.589825	0.671471	1.402755	0.032558	0.140763	0.156074	0.054626	0.338559	0
Sacramento	2025	T7 Public	Aggregate	10	Diesel	10825.2	10825.2	0	15.03673	0.0947	0.098982	3015.915	0.020917	0.475159	0.450332	0.512669	1.089253	0.028559	0.140763	0.156074	0.054626	0.296974	0
Sacramento	2025	T7 Public	Aggregate	15	Diesel	8314.294	8314.294	0	10.69801	0.068094	0.071173	2483.408	0.012034	0.391262	0.259085	0.294949	0.760133	0.023516	0.140763	0.154002	0.053901	0.244539	0
Sacramento	2025	T7 Public	Aggregate	20	Diesel	6208.04	6208.04	0	8.420693	0.049475	0.051712	2128.594	0.006611	0.353261	0.142329	0.162031	0.567452	0.020157	0.140763	0.150659	0.052731	0.209601	0
Sacramento	2025	T7 Public	Aggregate	25	Diesel	10321.67	10321.67	0	7.580697	0.041615	0.043496	1932.28	0.004797	0.304431	0.103272	0.117568	0.455424	0.018298	0.140763	0.147317	0.051561	0.19027	0
Sacramento	2025	T7 Public	Aggregate	30	Diesel	16772.02	16772.02	0	7.015992	0.037044	0.038719	1801.715	0.003835	0.283861	0.082557	0.093985	0.372413	0.017061	0.140763	0.145244	0.050836	0.177413	0
Sacramento	2025	T7 Public	Aggregate	35	Diesel	19680.32	19680.32	0	6.569734	0.033869	0.035401	1699.485	0.0031	0.267755	0.066743	0.304935	0.16093	0.140763	0.122908	0.043018	0.167347	0	
Sacramento	2025	T7 Public	Aggregate	40	Diesel	20561.4	20561.4	0	6.246427	0.032083	0.033533	1624.397	0.002563	0.255924	0.055189	0.062828	0.251236	0.015382	0.140763	0.106722	0.037353	0.159953	0
Sacramento	2025	T7 Public	Aggregate	45	Diesel	21571.45	21571.45	0	6.05838	0.031691	0.033124	1575.751	0.002202	0.24826	0.047399	0.053961	0.210054	0.014921	0.140763	0.090537	0.031688	0.155163	0
Sacramento	2025	T7 Public	Aggregate	50	Diesel	14125.42	14125.42	0	5.980141	0.032707	0.034186	1553.113	0.001996	0.244694	0.042983	0.048932	0.180495	0.014707	0.140763	0.078883	0.027609	0.152934	0
Sacramento	2025	T7 Public	Aggregate	55	Diesel	14095.49	14095.49	0	6.02048	0.035155	0.036745	1556.21	0.001933	0.245182	0.041616	0.047377	0.161946	0.014736	0.140763	0.078883	0.027609	0.153238	0
Sacramento	2025	T7 Public	Aggregate	60	Diesel	16527.08	16527.08	0	6.123672	0.037749	0.039456	1584.979	0.001977	0.249714	0.042558	0.048449	0.156136	0.015009	0.140763	0.078883	0.027609	0.156071	0
Sacramento	2025	T7 Public	Aggregate	65	Diesel	7387.983	7387.983	0	6.250739	0.039707	0.041502	1634.487	0.00203	0.257514	0.043696	0.049744	0.157751	0.015478	0.140763	0.078883	0.027609	0.160946	0
Sacramento	2025	T7 Public	Aggregate	70	Diesel	4031.622	4031.622	0	6.269074	0.039707	0.041502	1634.487	0.00203	0.257514	0.043715	0.049766	0.157934	0.015478	0.140763	0.078883	0.027609	0	

Sacramento	2025	T7 SWCV	Aggregate	15	Diesel	1620.395	1620.395	0	17.86691	0.020152	0.021063	5976.137	0.001921	0.941543	0.041359	0.047084	0.130675	0.05659	0.062243	0.21	0.0735	0.588464	0
Sacramento	2025	T7 SWCV	Aggregate	20	Diesel	1705.058	1705.058	0	13.87631	0.014674	0.015338	4987.048	0.001314	0.785711	0.028288	0.032203	0.091244	0.047224	0.062243	0.21	0.0735	0.49107	0
Sacramento	2025	T7 SWCV	Aggregate	25	Diesel	1402.569	1402.569	0	12.74129	0.012396	0.012956	4477.949	0.001	0.705503	0.021524	0.024504	0.069527	0.042403	0.062243	0.21	0.0735	0.440939	0
Sacramento	2025	T7 SWCV	Aggregate	30	Diesel	1504.513	1504.513	0	12.08659	0.011259	0.011768	4174.818	0.000781	0.657744	0.016807	0.019133	0.05367	0.039533	0.062243	0.21	0.0735	0.411109	0
Sacramento	2025	T7 SWCV	Aggregate	35	Diesel	1607.015	1607.015	0	11.58511	0.010731	0.011216	3931.071	0.000618	0.619342	0.0133	0.015141	0.041231	0.037225	0.062243	0.21	0.0735	0.387089	0
Sacramento	2025	T7 SWCV	Aggregate	40	Diesel	1677.135	1677.135	0	11.232	0.010809	0.011298	3742.971	0.000503	0.589707	0.010836	0.012336	0.031729	0.035444	0.062243	0.21	0.0735	0.368567	0
Sacramento	2025	T7 SWCV	Aggregate	45	Diesel	1639.614	1639.614	0	11.0234	0.011495	0.012015	3608.329	0.000432	0.568494	0.009292	0.010578	0.024814	0.034169	0.062243	0.21	0.0735	0.355309	0
Sacramento	2025	T7 SWCV	Aggregate	50	Diesel	1621.963	1621.963	0	10.96157	0.012792	0.013371	3525.817	0.000398	0.555494	0.008577	0.009764	0.020228	0.033387	0.062243	0.21	0.0735	0.347184	0
Sacramento	2025	T7 SWCV	Aggregate	55	Diesel	1491.772	1491.772	0	11.04243	0.014709	0.015374	3494.658	0.0004	0.550585	0.008622	0.009816	0.017784	0.033092	0.062243	0.21	0.0735	0.344115	0
Sacramento	2025	T7 SWCV	Aggregate	60	Diesel	1302.021	1302.021	0	11.12219	0.016541	0.017289	3508.01	0.000444	0.552688	0.009558	0.010881	0.017775	0.033219	0.062243	0.21	0.0735	0.34543	0
Sacramento	2025	T7 SWCV	Aggregate	65	Diesel	1641.262	1641.262	0	11.14747	0.018002	0.018816	3545.546	0.000523	0.558602	0.011267	0.012827	0.019716	0.033574	0.062243	0.21	0.0735	0.349126	0
Sacramento	2025	T7 SWCV	Aggregate	70	Diesel	495.2308	495.2308	0	11.13896	0.018002	0.018816	3545.546	0.00053	0.558602	0.011402	0.012981	0.019932	0.033574	0.062243	0.21	0.0735	0.349126	0
Sacramento	2025	T7 SWCV	Aggregate	75	Diesel	7.952834	7.952834	0	11.13015	0.018002	0.018816	3545.546	0.000537	0.558602	0.011571	0.013173	0.020228	0.033574	0.062243	0.21	0.0735	0.349126	0
Sacramento	2025	T7 SWCV	Aggregate	80	Diesel	0.218325	0.218325	0	11.10701	0.018002	0.018816	3545.546	0.000547	0.558602	0.011773	0.013403	0.020604	0.033574	0.062243	0.21	0.0735	0.349126	0
Sacramento	2025	T7 SWCV	Aggregate	85	Diesel	0.093903	0.093903	0	11.10603	0.018002	0.018816	3545.546	0.000558	0.558602	0.012009	0.013671	0.02106	0.033574	0.062243	0.21	0.0735	0.349126	0
Sacramento	2025	T7 Tractor	Aggregate	10	Diesel	626.0507	626.0507	0	7.271949	0.008033	0.008396	2689.899	0.003413	0.423795	0.073485	0.083657	0.740263	0.025472	0.219982	0.137192	0.048017	0.264872	0
Sacramento	2025	T7 Tractor	Aggregate	15	Diesel	1423.29	1423.29	0	4.842281	0.006441	0.006732	2204.879	0.001726	0.34738	0.037166	0.042311	0.405183	0.020879	0.219982	0.13537	0.047379	0.217112	0
Sacramento	2025	T7 Tractor	Aggregate	20	Diesel	1766.493	1766.493	0	3.714022	0.005557	0.005808	1934.328	0.001099	0.304754	0.023659	0.026934	0.272012	0.18317	0.219982	0.132432	0.046351	0.190471	0
Sacramento	2025	T7 Tractor	Aggregate	25	Diesel	2013.367	2013.367	0	2.87871	0.005136	0.005369	1765.369	0.000854	0.278135	0.018392	0.020938	0.211109	0.016717	0.219982	0.129493	0.045323	0.173834	0
Sacramento	2025	T7 Tractor	Aggregate	30	Diesel	2290.8	2290.8	0	2.162413	0.005475	0.005723	1630.591	0.000696	0.2569	0.014981	0.017055	0.165346	0.015441	0.219982	0.127672	0.044685	0.160563	0
Sacramento	2025	T7 Tractor	Aggregate	35	Diesel	2593.058	2593.058	0	1.604249	0.006607	0.006905	1526.937	0.000577	0.24057	0.012427	0.014147	0.126966	0.014459	0.219982	0.108052	0.037818	0.150356	0
Sacramento	2025	T7 Tractor	Aggregate	40	Diesel	2709.84	2709.84	0	1.204104	0.008531	0.008917	1454.019	0.000498	0.229081	0.010712	0.012195	0.095893	0.013769	0.219982	0.093835	0.032842	0.143176	0
Sacramento	2025	T7 Tractor	Aggregate	45	Diesel	3053.492	3053.492	0	0.961848	0.011248	0.011757	1411.478	0.000456	0.222379	0.009825	0.011185	0.07207	0.013366	0.219982	0.079619	0.027867	0.138987	0
Sacramento	2025	T7 Tractor	Aggregate	50	Diesel	3750.025	3750.025	0	0.877487	0.014758	0.015425	1398.97	0.000453	0.220408	0.009756	0.011106	0.055456	0.013247	0.219982	0.069382	0.024284	0.137755	0
Sacramento	2025	T7 Tractor	Aggregate	55	Diesel	7587.57	7587.57	0	0.951337	0.01906	0.019922	1420.251	0.000488	0.223761	0.010499	0.011952	0.046022	0.013449	0.219982	0.069382	0.024284	0.139851	0
Sacramento	2025	T7 Tractor	Aggregate	60	Diesel	18051.01	18051.01	0	1.183145	0.024152	0.025244	1471.378	0.00056	0.231816	0.012061	0.01373	0.043821	0.013933	0.219982	0.069382	0.024284	0.144885	0
Sacramento	2025	T7 Tractor	Aggregate	65	Diesel	20404.74	20404.74	0	1.572335	0.030032	0.03139	1552.318	0.00067	0.244568	0.014424	0.016421	0.048795	0.0147	0.219982	0.069382	0.024284	0.152855	0
Sacramento	2025	T7 Tractor	Aggregate	70	Diesel	9389.041	9389.041	0	1.574559	0.030032	0.03139	1552.318	0.000671	0.244568	0.014456	0.016457	0.049088	0.0147	0.219982	0.069382	0.024284	0.152855	0
Sacramento	2025	T7 Tractor	Aggregate	75	Diesel	1561.179	1561.179	0	1.576453	0.030032	0.03139	1552.318	0.000673	0.244568	0.014494	0.016501	0.04949	0.0147	0.219982	0.069382	0.024284	0.152855	0
Sacramento	2025	T7 Tractor	Aggregate	80	Diesel	97.6895	97.6895	0	1.57655	0.030032	0.03139	1552.318	0.000675	0.244568	0.014541	0.016554	0.050001	0.0147	0.219982	0.069382	0.024284	0.152855	0
Sacramento	2025	T7 Tractor	Aggregate	85	Diesel	1.281472	1.281472	0	1.58003	0.030032	0.03139	1552.318	0.000678	0.244568	0.014595	0.016616	0.05062	0.0147	0.219982	0.069382	0.024284	0.152855	0
Sacramento	2025	T7 Utility	Aggregate	5	Diesel	18.00684	18.00683	0	6.040846	0.005073	0.005302	3389.963	0.004049	0.53409	0.087176	0.099243	0.97856	0.032101	0.22	0.137116	0.047991	0.333806	0
Sacramento	2025	T7 Utility	Aggregate	10	Diesel	70.7854	70.7854	0	4.434917	0.004314	0.004509	2879.248	0.002331	0.453627	0.050183	0.057129	0.604199	0.027265	0.22	0.137116	0.047991	0.283517	0
Sacramento	2025	T7 Utility	Aggregate	15	Diesel	69.73563	69.73563	0	3.013801	0.00346	0.003617	2344.841	0.001171	0.369431	0.025206	0.028696	0.329122	0.022204	0.22	0.135296	0.047353	0.230894	0
Sacramento	2025	T7 Utility	Aggregate	20	Diesel	54.59313	54.59313	0	2.344619	0.002991	0.003126	2048.717	0.000746	0.322776	0.01067	0.018294	0.220507	0.0194	0.22	0.132359	0.046326	0.201735	0
Sacramento	2025	T7 Utility	Aggregate	25	Diesel	66.6371	66.6371	0	1.825354	0.002771	0.002897	1857.518	0.000582	0.292653	0.012533	0.014268	0.170793	0.01759	0.22	0.129422	0.045298	0.182908	0
Sacramento	2025	T7 Utility	Aggregate	30	Diesel	87.85911	87.85911	0	1.374232	0.002967	0.003101	1707.954	0.000476	0.269089	0.01024	0.011657	0.13338	0.016173	0.22	0.127602	0.044661	0.168181	0
Sacramento	2025	T7 Utility	Aggregate	35	Diesel	108.6575	108.6575	0	1.02493	0.003598	0.00376	1593.306	0.000396	0.251026	0.008521	0.009701	0.102128	0.015088	0.22	0.107993	0.037797	0.156891	0
Sacramento	2025	T7 Utility	Aggregate	40	Diesel	149.5143	149.5143	0	0.777336	0.004664	0.004875	1513.548	0.000343	0.23846	0.007375	0.008396	0.07702	0.014332	0.22	0.093783	0.032824	0.149038	0
Sacramento	2025	T7 Utility	Aggregate	45	Diesel	149.9122	149.9122	0	0.630822	0.006166	0.006445	1468.664	0.000316	0.231389	0.006798	0.007739	0.058044	0.013907	0.22	0.079574	0.027851	0.144618	0
Sacramento	2025	T7 Utility	Aggregate	50	Diesel	143.6012	143.6012	0	0.586037	0.008104	0.008471	1458.645	0.000315	0.22981	0.006788	0.007728	0.04519	0.013812	0.22	0.069344	0.02427	0.143631	0
Sacramento	2025	T7 Utility	Aggregate	55	Diesel	224.2942	224.2942	0	0.64292	0.010477	0.010951	1483.483	0.000341	0.233723	0.007345	0.008361	0.03845	0.014048	0.22	0.069344	0.02427	0.146077	0
Sacramento	2025	T7 Utility	Aggregate	60	Diesel	168.6927	168.6927	0	0.80193	0.013287	0.013887	1543.234	0.000393	0.243137	0.008469	0.009642	0.037839	0.014614	0.22	0.069344	0.02427	0.151961	0
Sacramento	2025	T7 Utility	Aggregate	65	Diesel	1.636687	1.636687	0	1.064481	0.016531	0.017279	1637.882	0.000472	0.258049	0.01016	0.011567	0.043346	0.01551	0.22	0.069344	0.02427	0.161281	0
Sacramento	2025	T7 Utility	Aggregate	70	Diesel	0.002876	0.002876	0	1.059189	0.016531	0.017279	1637.882	0.000475	0.258049	0.010223	0.011638	0.043937	0.01551	0.22	0.069344	0.02427	0.161281	0
Sacramento	2025	UBUS	Aggregate	5	Diesel	0	0	0															
Sacramento	2025	UBUS	Aggregate	10	Diesel	4.566911	4.566911	0	0.925462	0.003331	0.003482	1935.53	0.005298	0.304944	0.114058	0.129847	0.152279	0.01834	0.22	0.11	0.0385	0.19059	0
Sacramento	2025	UBUS	Aggregate	15	Diesel	12.87643	12.87643	0	0.589697	0.002876	0.003006	1543.407	0.003789	0.243164	0.081578	0							

Units: miles/day for VMT, g/mile for RUNEX, PMBW and PMTW, mph for Speed, gallon/mile for Fuel Consumption.

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	VT	Nox_RUNE	PM2.5_RUNE	PM10_RUNE	CO2_RUNE	CH4_RUNE	N2O_RUNE	ROG_RUNE	TG0_RUNE	CO_RUNEX	SOx_RUNE	Fuel Consumption
SACRAMEN	2025	LDT2	Aggregate	5	Diesel	2.359776	0.153525	0.009816	0.01026	637.5407	0.012043	0.002123	0.259284	0.295177	2.475064	0.006027	0.062633
SACRAMEN	2025	LDT2	Aggregate	10	Diesel	179.8778	0.128404	0.008845	0.009245	536.8604	0.00901	0.084356	0.193981	0.220835	1.852362	0.005073	0.052722
SACRAMEN	2025	LDT2	Aggregate	15	Diesel	570.3761	0.087561	0.007558	0.0079	444.9799	0.004417	0.069945	0.09509	0.108254	0.906659	0.004207	0.043715
SACRAMEN	2025	LDT2	Aggregate	20	Diesel	2138.771	0.059364	0.006378	0.006666	365.585	0.001737	0.057465	0.037391	0.042568	0.350650	0.003456	0.035916
SACRAMEN	2025	LDT2	Aggregate	25	Diesel	6907.695	0.046443	0.005432	0.005677	306.5298	0.00105	0.048182	0.022615	0.025745	0.214229	0.002898	0.030114
SACRAMEN	2025	LDT2	Aggregate	30	Diesel	4824.355	0.039695	0.004788	0.005005	265.0615	0.000796	0.041664	0.017137	0.019509	0.162308	0.002506	0.02604
SACRAMEN	2025	LDT2	Aggregate	35	Diesel	8575.308	0.035257	0.004317	0.004512	239.2282	0.000635	0.037603	0.013671	0.015564	0.129505	0.002262	0.023502
SACRAMEN	2025	LDT2	Aggregate	40	Diesel	10506.89	0.032156	0.003959	0.004138	223.2766	0.000526	0.035096	0.011314	0.012881	0.107232	0.002131	0.021935
SACRAMEN	2025	LDT2	Aggregate	45	Diesel	4071.258	0.029888	0.003681	0.003848	215.2765	0.000447	0.033838	0.009629	0.010962	0.091337	0.002035	0.021149
SACRAMEN	2025	LDT2	Aggregate	50	Diesel	4081.328	0.028162	0.003463	0.003619	215.6342	0.000389	0.033895	0.00838	0.00954	0.07961	0.002039	0.021184
SACRAMEN	2025	LDT2	Aggregate	55	Diesel	7427.337	0.026827	0.003293	0.003441	225.4631	0.000345	0.03544	0.007443	0.008462	0.070801	0.002131	0.02215
SACRAMEN	2025	LDT2	Aggregate	60	Diesel	5733.807	0.026438	0.003241	0.003388	244.2227	0.000328	0.038388	0.007072	0.008051	0.067678	0.002309	0.023993
SACRAMEN	2025	LDT2	Aggregate	65	Diesel	840.5689	0.026651	0.003293	0.003442	274.317	0.000332	0.043119	0.007146	0.008136	0.068888	0.002593	0.026949
SACRAMEN	2025	LDT2	Aggregate	70	Diesel	222.3901	0.02686	0.00333	0.00348	295.9618	0.000334	0.046521	0.007198	0.008194	0.069735	0.002798	0.029076
SACRAMEN	2025	LHD1	Aggregate	5	Diesel	8166.805	1.772287	0.064687	0.067612	1187.051	0.036235	0.186588	0.780108	0.888101	3.306834	0.011222	0.116617
SACRAMEN	2025	LHD1	Aggregate	10	Diesel	27158.35	1.792469	0.048312	0.050497	997.9019	0.0265	0.156856	0.570536	0.649517	2.433597	0.009434	0.098035
SACRAMEN	2025	LHD1	Aggregate	15	Diesel	58817.2	1.783221	0.037012	0.038685	651.7135	0.014931	0.10244	0.321452	0.365952	1.389719	0.006161	0.064025
SACRAMEN	2025	LHD1	Aggregate	20	Diesel	64482.65	1.799928	0.029219	0.03054	555.4873	0.008061	0.087315	0.17354	0.197564	0.771747	0.005251	0.054572
SACRAMEN	2025	LHD1	Aggregate	25	Diesel	69013.64	1.857712	0.02387	0.024949	492.6644	0.005747	0.07744	0.12374	0.14087	0.568033	0.004657	0.0484
SACRAMEN	2025	LHD1	Aggregate	30	Diesel	58256.26	1.922371	0.02034	0.021259	447.3925	0.004633	0.070324	0.099747	0.113555	0.473894	0.004429	0.043952
SACRAMEN	2025	LHD1	Aggregate	35	Diesel	30744.09	2.002325	0.017987	0.0188	447.3925	0.003924	0.070324	0.084487	0.096183	0.418162	0.004429	0.043952
SACRAMEN	2025	LHD1	Aggregate	40	Diesel	16877.5	2.086536	0.016463	0.017208	435.1446	0.003475	0.068399	0.074821	0.085179	0.388738	0.004414	0.042749
SACRAMEN	2025	LHD1	Aggregate	45	Diesel	18216.37	2.162542	0.015575	0.016279	424.4483	0.003211	0.066718	0.069139	0.07871	0.380385	0.004013	0.041698
SACRAMEN	2025	LHD1	Aggregate	50	Diesel	70339.19	2.240548	0.015228	0.015917	444.9783	0.003095	0.069944	0.066644	0.07587	0.392064	0.004207	0.043715
SACRAMEN	2025	LHD1	Aggregate	55	Diesel	42358.9	2.332789	0.015406	0.016102	464.9866	0.003115	0.073089	0.067069	0.076354	0.42631	0.004396	0.045681
SACRAMEN	2025	T7 Single	Aggregate	5	Diesel	1698.133	9.633552	0.06707	0.07071	3292.458	0.046482	0.517529	0.00861	0.114767	1.702756	0.031106	0.323455
SACRAMEN	2025	T7 Single	Aggregate	10	Diesel	3956.797	7.135618	0.05898	0.066165	2722.163	0.029398	0.427886	0.00326	0.072017	1.057944	0.025718	0.267429
SACRAMEN	2025	T7 Single	Aggregate	15	Diesel	4920.738	5.171339	0.04673	0.044884	2142.114	0.016134	0.336711	0.035169	0.040037	0.573206	0.020238	0.210444
SACRAMEN	2025	T7 Single	Aggregate	20	Diesel	6286.959	4.116681	0.03971	0.04015	1829.332	0.01111	0.287545	0.02389	0.027197	0.382826	0.017283	0.179716
SACRAMEN	2025	T7 Single	Aggregate	25	Diesel	8642.503	3.213331	0.03791	0.039663	1596.429	0.008071	0.250936	0.018761	0.021358	0.292594	0.015082	0.156835
SACRAMEN	2025	T7 Single	Aggregate	30	Diesel	10895.1	2.402012	0.004135	0.004322	1402.522	0.000705	0.220457	0.015174	0.017275	0.224464	0.013525	0.137786
SACRAMEN	2025	T7 Single	Aggregate	35	Diesel	9390.317	1.759333	0.005002	0.005228	1253.569	0.00058	0.197044	0.012497	0.014227	0.169195	0.011843	0.123152
SACRAMEN	2025	T7 Single	Aggregate	40	Diesel	6013.906	1.284288	0.006392	0.006681	1149.571	0.000498	0.180699	0.010729	0.012215	0.126788	0.010861	0.112935
SACRAMEN	2025	T7 Single	Aggregate	45	Diesel	4819.316	0.976327	0.008305	0.00868	1090.527	0.000459	0.171416	0.009872	0.011238	0.097242	0.010303	0.107135
SACRAMEN	2025	T7 Single	Aggregate	50	Diesel	11392.52	0.835605	0.010741	0.011226	1076.437	0.000461	0.169201	0.009924	0.011298	0.080556	0.01017	0.105751
SACRAMEN	2025	T7 Single	Aggregate	55	Diesel	29326.08	0.861767	0.0137	0.014319	1107.302	0.000506	0.174052	0.010886	0.012393	0.076736	0.010461	0.108783
SACRAMEN	2025	T7 Single	Aggregate	60	Diesel	21145.03	1.055429	0.017182	0.017959	1183.121	0.005993	0.18597	0.012758	0.014524	0.085776	0.011738	0.116231
SACRAMEN	2025	T7 Single	Aggregate	65	Diesel	6761.266	1.413543	0.021827	0.022145	1303.895	0.000722	0.204954	0.015554	0.017691	0.107677	0.012319	0.128096
SACRAMEN	2025	T7 Single	Aggregate	70	Diesel	590.2083	1.414727	0.021187	0.022145	1303.895	0.000869	0.204954	0.018712	0.021303	0.137549	0.012319	0.128096
SACRAMEN	2025	T7 Single	Aggregate	75	Diesel	21.84413	1.419228	0.021187	0.022145	1303.895	0.001053	0.204954	0.022667	0.025804	0.178473	0.012319	0.128096
SACRAMEN	2025	T7 Single	Aggregate	80	Diesel	0											
SACRAMEN	2025	T7 Single	Aggregate	85	Diesel	0											
SACRAMEN	2025	T7 Single	Aggregate	90	Diesel	0											
SACRAMEN	2025	T7 single cr	Aggregate	5	Diesel	3011.779	10.67713	0.015398	0.016094	3412.602	0.006874	0.536414	0.147995	0.168481	1.809294	0.032241	0.335258
SACRAMEN	2025	T7 single cr	Aggregate	10	Diesel	2071.609	8.179135	0.013205	0.013802	2827.673	0.004617	0.444471	0.099399	0.113519	1.124621	0.026714	0.277794
SACRAMEN	2025	T7 single cr	Aggregate	15	Diesel	440.0739	5.810807	0.009755	0.010196	2227.568	0.002532	0.350143	0.054523	0.06207	0.620631	0.021045	0.218839
SACRAMEN	2025	T7 single cr	Aggregate	20	Diesel	438.3551	4.634792	0.007516	0.007856	1900.461	0.001542	0.298726	0.033206	0.037802	0.417927	0.017955	0.186704
SACRAMEN	2025	T7 single cr	Aggregate	25	Diesel	591.3068	3.685532	0.006722	0.007026	1659.665	0.001181	0.260876	0.025436	0.028957	0.321236	0.01568	0.163048
SACRAMEN	2025	T7 single cr	Aggregate	30	Diesel	709.8416	2.840577	0.006735	0.00704	1460.642	0.000956	0.229593	0.020586	0.023435	0.248558	0.013799	0.143495
SACRAMEN	2025	T7 single cr	Aggregate	35	Diesel	916.6886	2.17392	0.007401	0.007735	1307.622	0.000786	0.20554	0.016929	0.019273	0.189533	0.012354	0.128462
SACRAMEN	2025	T7 single cr	Aggregate	40	Diesel	1175.336	1.685598	0.008718	0.009113	1200.588	0.000672	0.188716	0.014458	0.016459	0.144138	0.011343	0.117947
SACRAMEN	2025	T7 single cr	Aggregate	45	Diesel	1428.123	1.373857	0.01069	0.011173	1139.528	0.000611	0.179118	0.013161	0.014982	0.112363	0.010766	0.111949
SACRAMEN	2025	T7 single cr	Aggregate	50	Diesel	1435.14	1.239014	0.013318	0.01392	1124.436	0.000605	0.176746	0.013026	0.014829	0.094204	0.010623	0.110466
SACRAMEN	2025	T7 single cr	Aggregate	55	Diesel	1750.997	1.283017	0.016066	0.017357	1155.311	0.006652	0.181599	0.014038	0.015981	0.089669	0.010915	0.113499
SACRAMEN	2025	T7 single cr	Aggregate	60	Diesel	6426.94	1.501813	0.020402	0.021324	1232.004	0.000746	0.193654	0.016053	0.018275	0.098652	0.011639	0.121034
SACRAMEN	2025	T7 single cr	Aggregate	65	Diesel	3150.983	1.887303	0.024638	0.025753	1354.267	0.000876	0.212872	0.018867	0.021478	0.120772	0.012794	0.133045
SACRAMEN	2025	T7 single cr	Aggregate	70	Diesel	703.5189	1.8953	0.024638	0.025753	1354.267	0.001012	0.212872	0.021791	0.024807	0.148309	0.012794	0.133045
SACRAMEN	2025	T7 single cr	Aggregate	75	Diesel	558.1872	1.898057	0.024638	0.025753	1354.267	0.001181	0.212872	0.025436	0.028957	0.186034	0.012794	0.133045
SACRAMEN	2025	T7 single cr	Aggregate	80	Diesel	0											
SACRAMEN	2025	T7 single cr	Aggregate	85	Diesel	0											
SACRAMEN	2025	T7 single cr	Aggregate	90	Diesel	0											

Units: miles/day for VMT, g/mile for RUNEX, PMBW and PMTW, mph for Speed, gallon/mile for Fuel Consumption.

Region	Calendar Yr	Vehicle Cat	Model Year	Speed	Fuel	VMT	NOx_RUNE	PM2.5_RUN	PM10_RUN	CO2_RUNE	CH4_RUNE	N2O_RUNE	ROG_RUNE	TOG_RUNE	CO_RUNEX	SOx_RUNE	Fuel Consumption
SACRAMEN	2025	LDT2	Aggregate		5 Diesel	2.359776	0.153525	0.009816	0.01026	637.5407	0.012043	0.100213	0.259284	0.295177	2.475064	0.006027	0.062633
SACRAMEN	2025	LDT2	Aggregate		10 Diesel	179.8778	0.128404	0.008845	0.009245	536.6604	0.00901	0.084356	0.193981	0.220835	1.852362	0.005073	0.052722
SACRAMEN	2025	LDT2	Aggregate		15 Diesel	570.3761	0.087561	0.007558	0.0079	444.9799	0.004417	0.069945	0.09509	0.108254	0.906659	0.004207	0.043715
SACRAMEN	2025	LDT2	Aggregate		20 Diesel	2138.771	0.059364	0.006378	0.006666	365.585	0.001737	0.057465	0.037391	0.042568	0.355002	0.003456	0.035916
SACRAMEN	2025	LDT2	Aggregate		25 Diesel	6907.695	0.046433	0.005432	0.005677	306.5298	0.00105	0.048182	0.022615	0.025745	0.214229	0.002898	0.030114
SACRAMEN	2025	LDT2	Aggregate		30 Diesel	4824.355	0.039695	0.004788	0.005005	265.0615	0.000796	0.041664	0.017137	0.019509	0.162308	0.002506	0.02604
SACRAMEN	2025	LDT2	Aggregate		35 Diesel	8575.308	0.035257	0.004317	0.004512	239.2282	0.000635	0.037603	0.013671	0.015564	0.129505	0.002262	0.023502
SACRAMEN	2025	LDT2	Aggregate		40 Diesel	10506.89	0.032156	0.003959	0.004138	223.2766	0.000526	0.035096	0.011314	0.012881	0.107232	0.002111	0.021935
SACRAMEN	2025	LDT2	Aggregate		45 Diesel	4071.258	0.029888	0.003681	0.003848	215.2765	0.000447	0.033838	0.009629	0.010962	0.091337	0.002035	0.021149
SACRAMEN	2025	LDT2	Aggregate		50 Diesel	4081.328	0.028162	0.003463	0.003619	215.6342	0.000389	0.033895	0.00838	0.00954	0.07961	0.002039	0.021184
SACRAMEN	2025	LDT2	Aggregate		55 Diesel	7427.337	0.026827	0.003293	0.003441	225.4631	0.000345	0.03544	0.007433	0.008462	0.070801	0.002131	0.02215
SACRAMEN	2025	LDT2	Aggregate		60 Diesel	5733.807	0.026438	0.003241	0.003388	244.2227	0.000328	0.038388	0.007072	0.008051	0.067678	0.002309	0.023993
SACRAMEN	2025	LDT2	Aggregate		65 Diesel	840.5689	0.026651	0.003293	0.003442	274.3137	0.000332	0.043119	0.007146	0.008136	0.068888	0.002593	0.026949
SACRAMEN	2025	LDT2	Aggregate		70 Diesel	222.3901	0.02686	0.00333	0.00348	295.9618	0.000334	0.046521	0.007198	0.008194	0.069735	0.002798	0.029076
SACRAMEN	2025	T7 Single	Aggregate		5 Diesel	1698.133	9.633552	0.006707	0.00701	3292.158	0.004682	0.517529	0.100811	0.114766	1.720756	0.031106	0.323455
SACRAMEN	2025	T7 Single	Aggregate		10 Diesel	3956.797	7.315618	0.005898	0.006165	2722.463	0.002938	0.427886	0.06326	0.072017	1.057944	0.025718	0.267429
SACRAMEN	2025	T7 Single	Aggregate		15 Diesel	4920.738	5.171339	0.004673	0.004884	2142.114	0.001634	0.336711	0.035169	0.040037	0.573206	0.020238	0.210444
SACRAMEN	2025	T7 Single	Aggregate		20 Diesel	6286.959	4.116681	0.003971	0.004415	1829.332	0.00111	0.287545	0.02389	0.027197	0.382826	0.017283	0.179716
SACRAMEN	2025	T7 Single	Aggregate		25 Diesel	8642.503	3.213331	0.003791	0.003963	1596.429	0.000871	0.250936	0.018761	0.021358	0.292594	0.015082	0.156835
SACRAMEN	2025	T7 Single	Aggregate		30 Diesel	10895.1	2.402012	0.004135	0.004322	1402.522	0.000705	0.220457	0.015174	0.017275	0.224464	0.01325	0.137786
SACRAMEN	2025	T7 Single	Aggregate		35 Diesel	9390.317	1.759333	0.005002	0.005228	1253.569	0.00058	0.197044	0.012497	0.014227	0.169195	0.011843	0.123152
SACRAMEN	2025	T7 Single	Aggregate		40 Diesel	6013.906	1.284288	0.006392	0.006681	1149.571	0.000498	0.180696	0.010729	0.012215	0.126788	0.010861	0.112935
SACRAMEN	2025	T7 Single	Aggregate		45 Diesel	4819.316	0.976327	0.008305	0.00868	1090.527	0.000459	0.171416	0.009872	0.011238	0.097242	0.010303	0.107135
SACRAMEN	2025	T7 Single	Aggregate		50 Diesel	11392.52	0.835605	0.010741	0.011226	1076.437	0.000461	0.169201	0.009924	0.011298	0.080559	0.01017	0.105751
SACRAMEN	2025	T7 Single	Aggregate		55 Diesel	29326.08	0.861767	0.0137	0.014319	1107.302	0.000506	0.174052	0.010886	0.012393	0.076736	0.010461	0.108783
SACRAMEN	2025	T7 Single	Aggregate		60 Diesel	21145.03	1.055429	0.017182	0.017959	1183.121	0.000593	0.18597	0.012758	0.014524	0.085776	0.011178	0.116231
SACRAMEN	2025	T7 Single	Aggregate		65 Diesel	6761.266	1.413543	0.021187	0.022145	1303.895	0.000722	0.204954	0.01554	0.017691	0.107677	0.012319	0.128096
SACRAMEN	2025	T7 Single	Aggregate		70 Diesel	590.2083	1.414727	0.021187	0.022145	1303.895	0.000869	0.204954	0.018712	0.021303	0.137549	0.012319	0.128096
SACRAMEN	2025	T7 Single	Aggregate		75 Diesel	21.84413	1.419228	0.021187	0.022145	1303.895	0.001053	0.204954	0.022667	0.025804	0.178473	0.012319	0.128096
SACRAMEN	2025	T7 Single	Aggregate		80 Diesel	0											
SACRAMEN	2025	T7 Single	Aggregate		85 Diesel	0											
SACRAMEN	2025	T7 Single	Aggregate		90 Diesel	0											
SACRAMEN	2025	T7 single cc	Aggregate		5 Diesel	3011.779	10.67713	0.015398	0.016094	3412.602	0.006874	0.536414	0.147995	0.168481	1.802924	0.032241	0.335258
SACRAMEN	2025	T7 single cc	Aggregate		10 Diesel	2071.609	8.179135	0.013205	0.013802	2827.673	0.004617	0.444471	0.099399	0.113159	1.124621	0.026714	0.277794
SACRAMEN	2025	T7 single cc	Aggregate		15 Diesel	440.0739	5.810807	0.009755	0.010196	2227.568	0.002532	0.350143	0.054523	0.06207	0.620631	0.012045	0.218839
SACRAMEN	2025	T7 single cc	Aggregate		20 Diesel	438.3951	4.634792	0.007516	0.007856	1900.461	0.001542	0.298726	0.033206	0.037802	0.417927	0.017955	0.186704
SACRAMEN	2025	T7 single cc	Aggregate		25 Diesel	591.3068	3.685532	0.006722	0.007026	1659.665	0.001181	0.260876	0.025436	0.028957	0.321236	0.01568	0.163048
SACRAMEN	2025	T7 single cc	Aggregate		30 Diesel	709.8416	2.840577	0.006735	0.00704	1460.642	0.000956	0.229593	0.020586	0.023435	0.248558	0.013799	0.143495
SACRAMEN	2025	T7 single cc	Aggregate		35 Diesel	916.6886	2.17392	0.007401	0.007735	1307.622	0.000786	0.20554	0.016929	0.019273	0.189533	0.012354	0.128462
SACRAMEN	2025	T7 single cc	Aggregate		40 Diesel	1175.336	1.685598	0.008718	0.009113	1200.588	0.000672	0.188716	0.014458	0.016459	0.144138	0.011343	0.117947
SACRAMEN	2025	T7 single cc	Aggregate		45 Diesel	1428.123	1.373857	0.01069	0.011173	1139.528	0.000611	0.179118	0.013161	0.014982	0.112363	0.010766	0.111949
SACRAMEN	2025	T7 single cc	Aggregate		50 Diesel	1435.14	1.239014	0.013318	0.01392	1124.436	0.000605	0.176746	0.013026	0.014829	0.094204	0.010623	0.110466
SACRAMEN	2025	T7 single cc	Aggregate		55 Diesel	1750.997	1.283017	0.016606	0.017357	1155.311	0.000652	0.181599	0.014038	0.015981	0.089669	0.010915	0.113499
SACRAMEN	2025	T7 single cc	Aggregate		60 Diesel	6426.94	1.501813	0.020402	0.021324	1232.004	0.000746	0.193654	0.016053	0.018275	0.098652	0.011639	0.121034
SACRAMEN	2025	T7 single cc	Aggregate		65 Diesel	3150.983	1.887303	0.024638	0.025753	1354.267	0.000876	0.212872	0.018867	0.021478	0.120772	0.012794	0.133045
SACRAMEN	2025	T7 single cc	Aggregate		70 Diesel	703.5189	1.8953	0.024638	0.025753	1354.267	0.001012	0.212872	0.021791	0.024807	0.148309	0.012794	0.133045
SACRAMEN	2025	T7 single cc	Aggregate		75 Diesel	558.1872	1.898057	0.024638	0.025753	1354.267	0.001181	0.212872	0.025436	0.028957	0.186034	0.012794	0.133045
SACRAMEN	2025	T7 single cc	Aggregate		80 Diesel	0											
SACRAMEN	2025	T7 single cc	Aggregate		85 Diesel	0											
SACRAMEN	2025	T7 single cc	Aggregate		90 Diesel	0											

Source: EMFAC2017 (v1.0.2) Emission Rates
Region Type: County
Region: Sacramento
Calendar Year: 2025
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HOTSOAK and RUNLOSS, g/vehicle/day for IDLEX, RESTLOSS, and DIURN.

Region	Calendar Y	Vehicle Cat	Model Year	Speed	Fuel	Population	VMT	Trips	NOx_RUNE	NOx_IDLEX	NOx_STREX	PM2.5_RUNE	PM2.5_IDLEX	PM2.5_STREX	PM2.5_PMTW	PM2.5_PMBW	PM10_RUN	PM10_IDLEX	PM10_STREX	PM10_PMTW	PM10_PMBW	CO2_RUNE	CO2_IDLEX	CO2_STREX	CH4_RUNE
SACRAMEN	2025	LDT2	Aggregate	Aggregate	Diesel	1470.049	56082.32	7131.619	0.035103	0	0	0.004181	0	0	0.002	0.01575	0.00437	0	0	0.008	0.03675	250.6164	0	0	0.00068
SACRAMEN	2025	T7 Single	Aggregate	Aggregate	Diesel	1672.032	125860.7	19295.02	1.962939	25.83305	3.607193	0.010564	0.008901	0	0.009	0.02646	0.011042	0.009304	0	0.036	0.06174	1356.971	5248.49	0	0.000782
SACRAMEN	2025	T7 single cr	Aggregate	Aggregate	Diesel	354.5533	24808.92	1602.922	3.459977	18.95851	4.456663	0.016543	0.007134	0	0.009	0.02646	0.017291	0.007457	0	0.036	0.06174	1682.269	3913.502	0	0.001885

CH4_IDLEX	CH4_STRE	N2O_RUNE	N2O_IDLE	N2O_STRE	ROG_RUNE	ROG_IDLE	ROG_STRE	ROG_HOTS	ROG_RUNI	ROG_RESTI	ROG_DIUR	TOG_RUNE	TOG_IDLEX	TOG_STRE	TOG_HOTS	TOG_RUNI	TOG_RESTI	TOG_DIURI	CO_RUNE	CO_IDLEX	CO_STREX	SOx_RUNE	SOx_IDLEX	SOx_STREX
0	0	0.039393	0	0	0.014648	0	0	0	0	0	0	0.016676	0	0	0	0	0	0	0.139075	0	0	0.002369	0	0
0.101539	0	0.213297	0.82499	0	0.016847	2.186104	0	0	0	0	0	0.019179	2.488713	0	0	0	0	0	0.20598	32.30148	0	0.01282	0.049585	0
0.073428	0	0.264429	0.615148	0	0.040573	1.580881	0	0	0	0	0	0.04619	1.799713	0	0	0	0	0	0.42731	23.29829	0	0.015893	0.036973	0

