CITY OF FRESNO NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION	Filed with the FRESNO COUNTY CLERK 2220 Tulare Street, Fresno, CA 93721
ENVIRONMENTAL ASSESSMENT FOR DEVELOPMENT PERMIT APPLICATION NO. P21-04368	
APPLICANT:	
Kenny Reyes Yamabe & Horn Engineering, Inc. 2985 N Burl Ave Fresno, CA 93727	
PROJECT LOCATION:	
5255 East Home Avenue; Located on the northside of East Home Avenue between East McKinley and East Home Avenues in the City and County of Fresno, California (See Exhibit A - Vicinity Map)	
APN: 455-201-24 & 38	
Site Latitude: 36°45'50.5" N & Site Longitude: 119°42'56.6" W Mount Diablo Base & Meridian, Township T.13S, Range R.21E, Section 32	

The full Initial Study and the Fresno General Plan Program Environmental Impact Report (PEIR) are on file in the Planning and Development Department, Fresno City Hall, 3<sup>rd</sup> Floor, Room 3043, 2600 Fresno Street, Fresno, CA 93721.

#### **PROJECT DESCRIPTION:**

Development Permit Application No. P21-04368 was filed by Kenny Reyes of Yamabe & Horn Engineering Inc. on behalf of Stephen Zimmerman and pertains to ±10.13 acres of property. The applicant proposes a new ±162,650 square foot warehouse and parking lot with 144 standard parking stalls, 12 compact parking stalls and 55 truck parking stalls on a vacant lot. In addition, the project consists of on and off-site improvements to be provided including landscaping and trees; one trash enclosure; three drive approaches; and curbs, gutters, and sidewalks.

The City of Fresno has prepared an Initial Study of the above-described project and proposes to adopt a Mitigated Negative Declaration. The environmental analysis contained in the Initial Study is tiered from the PEIR State Clearinghouse No. 2019050005 prepared for the Fresno General Plan pursuant to CEQA Guidelines § 15152 and incorporates the PEIR by reference pursuant to CEQA Guidelines § 15152.

Pursuant to the California Public Resources Code (PRC) §§ 21093 and 21094 and California Environmental Quality Act (CEQA) Guidelines §§ 15070 to 15075, 15150, and 15152, this project has

been evaluated with respect to each item on the attached Appendix G/Initial Study Checklist to determine whether this project may cause any additional significant effect on the environment, which was not previously examined in the PEIR. After conducting a review of the adequacy of the PEIR pursuant to PRC § 21157.6(b)(1) and CEQA Guidelines §§ 15151 and 15179(b), the Planning and Development Department, as lead agency, finds that no substantial changes have occurred with respect to the circumstances under which the PEIR was certified and that no new information, which was not known and could not have been known at the time that the PEIR was certified as complete, has become available.

The completed Appendix G/Initial Study Checklist, its associated narrative, technical studies, and mitigation measures reflect applicable comments of responsible and trustee agencies and research and analyses conducted to examine the interrelationship between the proposed project and the physical environment. The information contained in the project application and its related environmental assessment application, responses to requests for comment, checklist, Initial Study narrative, and any attachments thereto, combine to form a record indicating that an Initial Study has been completed in compliance with the State CEQA Guidelines and the CEQA.

All new development activity and many non-physical projects contribute directly or indirectly toward cumulative impacts on the physical environment. It has been determined that the incremental effect contributed by this project toward cumulative impacts is not considered substantial or significant in itself and/or that cumulative impacts accruing from this project may be mitigated to less than significant with application of feasible mitigation measures.

With mitigation imposed under the PEIR and project specific mitigation, there is no substantial evidence in the record that this project may have additional significant, direct, indirect, or cumulative effects on the environment that are significant and that were not identified and analyzed in the PEIR. The Planning and Development Department, as lead agency, finds that no substantial changes have occurred with respect to the circumstances under which the PEIR was certified and that no new information, which was not known and could not have been known at the time that the PEIR was certified as complete has become available.

Based upon the evaluation guided by the Appendix G/Initial Study Checklist, it was determined that there are project specific foreseeable impacts which require project level mitigation measures.

The Initial Study has concluded that the proposed project will not result in any adverse effects, which fall within the "Mandatory Findings of Significance" contained in § 15065 of the State CEQA Guidelines. The finding is, therefore, made that the proposed project will not have a significant adverse effect on the environment.

Public notice has been provided regarding staff's finding in the manner prescribed by § 15072 of the CEQA Guidelines and by § 21092 of the PRC Code (CEQA provisions).

Additional information on the proposed project, including the PEIR, proposed environmental finding of a Mitigated Negative Declaration and the Initial Study may be obtained from the Planning and Development Department, Fresno City Hall, 2600 Fresno Street, 3rd Floor, Room 3043, Fresno, California 93721 3604. Please contact Steven Lieng, Planner II at (559) 621-8007 or via email at <u>Steven.Lieng@fresno.gov</u> for more information.

ANY INTERESTED PERSON may comment on the proposed environmental finding. Comments must be in writing and must state (1) the commentor's name and address; (2) the commentor's interest in,

or relationship to, the project; (3) the environmental determination being commented upon; and (4) the specific reason(s) why the proposed environmental determination should or should not be made. Any comments may be submitted at any time between the publication date of this notice and close of business on October 13, 2022. Please direct comments to Steven Lieng, Planner II, City of Fresno Planning and Development Department, City Hall, 2600 Fresno Street, Room 3043, Fresno, California, 93721-3604; or by email to <u>Steven Lieng@fresno.gov</u>.

INITIAL STUDY PREPARED BY:	SUBMITTED BY:
Steven Lieng, Planner II	Digitally signed by Ralph Kachadourian DN: CUS, E-ralph: Kachadourian@resno.gov, OU-Planning & Development Def', CN-Ralph Rachadourian Reason: I am approving this document
DATE: September 23, 2022	Ralph Kachadourian, Supervising Planner
	CITY OF FRESNO
	PLANING AND DEVELOPMENT
Attachments:	
Exhibit A – Vicinity Map	

# Exhibit A: Vicinity Map



# MITIGATION MONITORING AND REPORTING PROGRAM – September 2022

This Mitigation Monitoring and Reporting Program (MMRP) has been formulated based upon the findings of the Initial Study/Mitigated Negative Declaration (IS/MND) for the City of Fresno's P21-04368 Home Avenue Warehouse Project (proposed Project). The MMRP lists mitigation measures recommended in the IS/MND for the proposed Project and identifies monitoring and reporting requirements as well as conditions recommended by responsible agencies who commented on the project.

The first column of the Table identifies the mitigation measure. The second column, entitled "Party Responsible for Implementing Mitigation," names the party responsible for carrying out the required action. The third column, "Implementation Timing," identifies the time the mitigation measure should be initiated. The fourth column, "Party Responsible for Monitoring," names the party ultimately responsible for ensuring that the mitigation measure is implemented. The last column will be used by the City to ensure that individual mitigation measures have been monitored.

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
<b>AES-4.3:</b> Lighting for Non-Residential Uses. Lighting systems for non-residential uses, not including public facilities, shall provide shields on the light fixtures and orient the lighting system away from adjacent properties. Low intensity light fixtures shall also be used if excessive spillover light onto adjacent properties will occur.	Project Applicant and project architect	Lighting systems to be confirmed during plan check, prior to issuance of building permits.	Public Works Department (PW) and Planning and Development Department (PDD)	
<b>AES-4.5:</b> Use of Non-Reflective Materials. Materials used on building facades shall be non-reflective.	Project Applicant and project architect	Lighting systems to be confirmed during plan check, prior to issuance of building permits.	PW & PDD	
<b>CUL-1.1:</b> If previously unknown resources are encountered before or during grading activities, construction shall stop in the immediate vicinity of the find and a qualified historical resources specialist shall be consulted to determine whether the resource requires further study. The qualified historical resources specialist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines and the City's Historic Preservation Ordinance. If the resources are determined to be unique historical resources as defined under Section 15064.5 of the CEQA Guidelines, measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate measures for significant resources could include avoidance or capping,	Project Applicant and qualified historical resources specialist	Planning and Development Department to review contract specifications to ensure inclusion of provisions included in project-specific mitigation measure. Following discovery of previously unknown resource, a qualified historical resources	PDD	

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any historical artifacts recovered as a result of mitigation shall be provided to a City-approved institution or person who is capable of providing long-term preservation to allow future scientific study.		specialist shall prepare recommendations and submit to the Planning and Development Department. Timing for recommendations shall be established by project-specific mitigation measure.		
<b>CUL-3:</b> In the event that human remains are unearthed during excavation and grading activities of any future development project, all activity shall cease immediately. Pursuant to Health and Safety Code (HSC) Section 7050.5, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98(a). If the remains are determined to be of Native American descent, the coroner shall within 24 hours notify the Native American Heritage Commission (NAHC). The NAHC shall then contact the most likely descendent of the deceased Native American, who shall then serve as the consultant on how to proceed with the remains. Pursuant to PRC Section 5097.98(b), upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity, according to	Project Applicant and qualified historical resources specialist	Planning and Development Department to review construction specifications to ensure inclusion of provisions included in mitigation measure.	PDD	

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.	Department of			
<b>HYD-2.1:</b> The City shall continue to be an active participant in the North Kings Groundwater Sustainability Agency and the implementation of the North Kings Groundwater Sustainability Plan in order to ensure that the Kings Subbasin has balanced levels of pumping and recharge.	Department of Public Utilities	Ongoing. DPU to continue to coordinate with North Kings Groundwater Sustainability Agency as established by a Joint Powers Agreement with member agencies and the City of Fresno as adopted in January 2017.		

# CITY OF FRESNO MITIGATED NEGATIVE DECLARATION FOR DEVELOPMENT PERMIT APPLICATION NO. P21-04368

State Clearinghouse Number: XXXXXXXXXXXXXXXXX

City of Fresno Planning and Development Department 2600 Fresno Street Fresno, CA 93721

Prepared by:

Crawford & Bowen Planning, Inc. 113 N. Church Street, Suite 302 Visalia, CA 93292

Attachments:

Notice of Intent to Adopt a Mitigated Negative Declaration Appendix G/Initial Study for a Mitigated Negative Declaration Project Specific Mitigation Monitoring Checklist dated September 23, 2022

# APPENDIX G/INITIAL STUDY FOR A MITIGATED NEGATIVE DECLARATION

Environmental Checklist Form for:

#### Environmental Assessment Application No. P21-04368

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1.	Project title: Environmental Assessment Application No. P21-04368
2.	Lead agency name and address: City of Fresno Planning and Development Department 2600 Fresno Street Fresno, CA 93721
3.	Contact person and phone number: Steven Lieng Planner II City of Fresno Planning and Development Department (559) 621-8007
4.	Project location: North West of East Home Avenue and North Peach Avenue, Fresno, CA (APNs: 455-201-24, and -38)
5.	Project sponsor's name and address: Fatis, LLC Attn: Steve Zimmerman 16509 Saticoy St Van Nuys, CA 91406

6.	<b>General &amp; Community plan land use designation:</b> General Plan: Current, Light Industrial. Proposed, no change. Community Plan: Roosevelt Community Plan
7.	<b>Zoning:</b> Current: IS – Light Industrial Proposed: no change.
8.	Description of project:
	Fatis, LLC, (herein, "Project Applicant") proposes to develop a warehouse and parking lot on a 10.13-acre site located at 5255 East Home Avenue in Fresno, CA 93727. APNs: 455-201-24 and -38. The proposed development consists of construction of a warehouse consisting of a 162,650 square foot concrete tilt-up shell building. Proposed parking spaces include 144 standard and 12 compact for a total of 156 parking spaces. Parking spaces and drive aisles will be constructed of asphalt concrete pavement and the proposed XX loading docks will be constructed of Portland cement concrete pavement. Site access is provided off East Home Ave.
	The site will have pole lighting to illuminate the parking areas, exterior building lighting to illuminate the loading docks, and typical streetlights along the private access road. Landscaping will be provided in all underdeveloped areas and perimeter fencing will be installed.
	Operational times are typical of other warehouse style projects which are typically Monday - Friday 6 a.m. – 6 p.m.; however, some users require 24/7 operations. Customer visits to the property are limited since these buildings are not typically sales buildings, but rather warehouses for goods distribution.
	Landscaping
	Site landscaping will be designed to meet City and state standards. Frontage landscaping, Valley Oak trees will be planted every 20 feet with shrubs planted all along the parking frontage. Along the west and east sides of the site there will be a five foot landscape buffer planted with Valley Oak trees and shrubs. Along the

southern site boundary, low shrubs will be planted with mulch. All landscape will be on a water schedule to keep water efficiency high and to prevent water loss.

#### Utilities

Proposed site utilities include two water meters, one 2" domestic service and a 2" landscape service which will tie in to the existing main. A new 8" fire service line will be installed that will service the buildings sprinkler system and four private onsite fire hydrants. There will be two proposed sewer tie ins for the building. Lastly, the onsite storm drain system will be installed and will tie in to the existing Fresno Metropolitan Flood Control District (FMFCD) inlet on Home Avenue. Additional utilities provided on-site include gas, electric and communication lines.

## Grading and Construction

The site is designed to meet City standards and will be graded to prevent on-site flooding. At buildout, the site will contain sunken docks, which will have storm drain inlets that will be connected to the FMFCD system. The site is proposed to match existing topography to be level, while matching existing grades to the north, east and west.

Site construction will include a shell concrete tilt-up building with asphalt concrete paving throughout the parking lot and drive aisles. The docks will be of concrete paving with concrete sidewalks. It is anticipated that construction will begin the last quarter of 2022 and will last approximately twelve months, depending on construction material accessibility.

To accommodate the proposed Project with the City of Fresno, a Lot Line Merger application and Development Permit application will need to be approved.

9.	Surrounding land uses and setting:						
		Planned Land Use	Existing Zoning	Existing Land Use			
	North	Airport	IL+PI – Railroad/Airport	Railroad/Airport			
	East Light Industrial		IL – Light Industrial	Light Industrial			
	South	Light Industrial	IL – Light Industrial	Light Industrial			
	West	Light Industrial	IL – Light Industrial	Light Industrial			
10.	Other p	ublic agencies who I, or participation ag	ese approval is required (e.g., preement):	permits, financing			
	approval, or participation agreement): Planning and Development Department, Building and Safety Services Division, Department of Public Works, Department of Public Utilities, Fire Department, Fresno Metropolitan Flood Control District, County of Fresno Department of Community Health, County of Fresno Department of Public Works and Planning, and San Joaquin Valley Air Pollution Control District.						
11.	Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code (PRC) Section 21080.3.1? If so, has consultation begun?						
	The State requires lead agencies to consider the potential effects of proposed projects and consult with California Native American tribes during the local planning process for the purpose of protecting Traditional Tribal Cultural Resources through the California Environmental Quality Act (CEQA) Guidelines. Pursuant to PRC Section 21080.3.1, the lead agency shall begin consultation with the California Native American tribe that is traditionally and culturally affiliated with the geographical area						

of the proposed project. Such significant cultural resources are either sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a tribe which is either on or eligible for inclusion in the California Historic Register or local historic register, or, the lead agency, at its discretion, and support by substantial evidence, choose to treat the resources as a Tribal Cultural Resources (PRC Section 21074(a)(1-2)). According to the most recent census data, California is home to 109 currently recognized Indian tribes. Tribes in California currently have nearly 100 separate reservations or Rancherias. Fresno County has a number of Rancherias such as Table Mountain Rancheria, Millerton Rancheria, Big Sandy Rancheria, Cold Springs Rancheria, and Squaw Valley Rancheria. These Rancherias are not located within the city limits.

Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See PRC Section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per PRC Section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that PRC Section 21082.3(c) contains provisions specific to confidentiality.

Currently, the Table Mountain Rancheria Tribe and the Dumna Wo Wah Tribe have requested to be notified pursuant to Assembly Bill 52 (AB52). A certified letter was mailed to the above-mentioned tribes on April 6, 2022. The 30-day comment period ended onMay 7, 2022. Neither tribe requested consultation.

### ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

Aesthetics	Agriculture and Forestry Resources
Air Quality	Biological Resources

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

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<u>_x</u> _	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT (EIR) is required.

I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An EIR is required, but it must analyze only the effects that remain to be addressed.

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

Steven Lieng

September 23, 2022

Steven Lieng, Planner II Date City of Fresno, Planning and Development Department

EVALUATION OF ADDITIONAL ENVIRONMENTAL IMPACTS NOT ASSESSED IN PROGRAM ENVIRONMENTAL IMPACT REPORT SCH NO. 2019050005 PREPARED FOR THE APPROVED FRESNO GENERAL PLAN (GP PEIR):

- 1. For purposes of this Initial Study, the following answers have the corresponding meanings:
  - a. "No Impact" means the specific impact category does not apply to the project, or that the record sufficiently demonstrates that project specific factors or general standards applicable to the project will result in no impact for the threshold under consideration.
  - b. "Less Than Significant Impact" means there is an impact related to the threshold under consideration, but that impact is less than significant.

- c. "Less Than Significant with Mitigation Incorporation" means there is a potentially significant impact related to the threshold under consideration, however, with the mitigation incorporated into the project, the impact is less than significant. For purposes of this Initial Study "mitigation incorporated into the project" means mitigation originally described in the GP PEIR and applied to an individual project, as well as mitigation developed specifically for an individual project.
- d. "Potentially Significant Impact" means there is substantial evidence that an effect may be significant related to the threshold under consideration.
- 2. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 3. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 4. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 5. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from, "Earlier Analyses," as described in (6) below, may be cross-referenced).

- Earlier analyses may be used where, pursuant to the tiering, Program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a. Earlier Analysis Used. Identify and state where they are available for review.
  - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in the PEIR or another earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 7. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 8. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 9. The explanation of each issue should identify:
  - a. The significance criteria or threshold, if any, used to evaluate each question; and
  - b. The mitigation measure identified, if any, to reduce the impact to less than significance.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS – Except as provid	ded in PRC Se	ection 21099, wo	ould the project	ot:
a) Have a substantial adverse effect on a scenic vista?				Х
b) Substantially damage scenic resources, including, but not limited to, trees, rock out- croppings, and historic buildings within a state scenic highway?				х
c) In non-urbanized areas, substantially degrade the existing visual character or quality public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			Х	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?		Х		

#### DISCUSSION

#### a) Have a substantial adverse effect on a scenic vista?

**No Impact.** A scenic vista is defined as a viewpoint that provides expansive views of highly valued landscape for the benefit of the general public.

The proposed project is located in an urbanized area. The adjacent parcels consist mostly of light industrial uses. There are no significant trees, rock outcroppings, and/or historic buildings located on the subject property that have been identified as important scenic resources.

The Sierra Nevada Mountains are the only natural and visual resource in the Project area. Views of these distant mountains are afforded only during clear conditions due to poor air quality in the valley.

Distant views of these mountains would largely be unaffected by the development of the Project because of the nature of the Project and distance. The City of Fresno does not identify views of these features as required to be "protected."

Visual character of the site is addressed further in Response c) below.

There are no scenic highways near the proposed site, therefore, the Project would result in a *less than significant impact* on scenic vistas or designated scenic resources or highways and no mitigation is required.

# b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

**No Impact.** As discussed in Impact a) above, the Project site is within an urbanized area of eastern Fresno. The site is surrounded by industrial development and the Fresno-Yosemite International Airport is to the north. There are no significant trees, rock outcroppings, and/or historic buildings located on the subject property that have been identified as important scenic resources.

According to the California Department of Transportation State Scenic Highway Mapping system, there are no eligible or officially-designated State Scenic Highways

within or near the project area. As such, there are no protected scenic resources on or near the Project site andthere is *no impact*.

# c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less Than Significant Impact. The proposed Project would alter the existing visual character of public views of the site from vacant land to fully developed with a warehouse and parking lot, including perimeter fencing and pole lighting. The Project design is subject to the City's Design Guidelines adopted for the City's General Plan which apply to site layout, building design, landscaping, interior street design, lighting, parking and signage. Detailed architectural plans, color palettes and building materials as well as landscaping plans will be submitted by the Project developer to the City of Fresno Planning and Development Department. The plans shall be required prior to issuance of any building permits. The review shall be substantially based on the building plans and elevations illustrated within this document.

The Project will require removal of minimal vegetation in the vacant lot. Curb and gutters, gates, electrical panels and pedestrian sidewalks are incorporated into the project design, along with site landscaping, which will provide visual screening of the Project site from vehicle passerbys.

The improvements such as those proposed by the Project are typical of large city urban areas and are generally expected from residents of the City. These improvements would not substantially degrade the visual character of the area and would not diminish the visual quality of the area, as they would be consistent with the existing visual setting. The Project itself is not visually imposing against the scale of the existing adjacent industrial buildings and nature of the surrounding area.

Therefore, the Project would have *less than significant impacts* on the visual character of the area.

# d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less Than Significant with Mitigation Incorporated. The subject site currently has no on-site sources of lighting. Project implementation will introduce new lighting that will be typical of commercial or industrial developments, such as security lights, parking lot lights and vehicle lights. Additional night lighting sources on the Project site, especially any unshielded light, could result in spillover light that could impact surrounding adjacent residential uses. This would create new sources of light that could potentially have a significant impact on nighttime light levels in the area. During the entitlement process, staff will ensure that lights are located in areas that will minimize light sources to the neighboring properties. Further, Mitigation Measure (MM) AES-4.3 from the PEIR require lighting systems to be shielded to direct light to ground surfaces and orient light away from adjacent properties. In addition, MM AES-4.5 requires use of non-reflective building materials to reduce glare impacts.

In addition, a condition of approval will require that lighting, where provided for public streets, shall be hooded and so arranged and controlled so as not to cause a nuisance either to traffic or to the living environment. The amount of light shall be provided according to the standards of the Department of Public Works. As a result, the Project will implement the necessary mitigation measures and will have a *less than significant impact with mitigation* with regards to light and glare.

#### Mitigation Measures

- a) The proposed project shall implement and incorporate, as applicable, the aesthetic related mitigation measures as identified in the attached Project Specific Mitigation Monitoring and Reporting Program dated September 23, 2022.
  - AES-4.3: Lighting for Non-Residential Uses. Lighting systems for nonresidential uses, not including public facilities, shall provide shields on the light fixtures and orient the lighting system away from adjacent properties. Low intensity light fixtures shall also be used if excessive spillover light onto adjacent properties will occur.
  - AES-4.5: Use of Non-Reflective Materials. Materials used on building facades shall be non-reflective.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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**II. AGRICULTURE AND FORESTRY RESOURCES –** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

a) Convert Prime Farmland,		
Unique Farmland, or Farmland of		
Statewide Importance (Farm-		
land), as shown on the maps		
prepared pursuant to the		Х
Farmland Mapping and Monito-		
ring Program of the California		
Resources Agency, to non-		
agricultural use?		
b) Conflict with existing zoning for		Х
agricultural use, or a Williamson		
Act contract?		

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				х
d) Result in the loss of forest land or conversion of forest land to non-forest use?				х
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non- forest use?				Х

#### DISCUSSION

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? **No Impact.** The site is within the City limits in an area substantially built up with industrial uses. The California Department of Conservation, Important Farmland Finder Program considers the Project site to be *Urban and Built-Up Land*. There is no farmland on-site and as such, there will be no conversion of land to non-agricultural uses. There is *no impact*.

#### b) Conflict with existing zoning for agricultural use or a Williamson Act contract?

**No Impact.** The site is zoned light industrial in the General Plan nor is it subject to a Williamson Act contract and no mitigation is required. There is *no impact.* 

# c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

**No Impact**. The site is zoned light industrial in the General Plan. The proposed project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production, and no mitigation is necessary. There is *no impact*.

### d) Result in the loss of forest land or conversion of forest land to non-forest use?

**No Impact**. As described in Impact c) above, there is no forest land on the Project site. There is *no impact*.

# e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

**No Impact.** As discussed in Impact a) above, there is no agricultural land on-site. The proposed Project will not involve new other changes in the existing environment that could result in conversion of Farmland.

#### Mitigation Measures

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY – Where avai applicable air quality management make the following determinations.	lable, the sig or air pollutio Would the pr	nificance criteri n control district oject:	ia establisheo may be relieo	I by the I upon to
a) Conflict with or obstruct implementation of the applicable air quality plan ( <i>e.g.</i> , by having potential emissions of regulated criterion pollutants which exceed the San Joaquin Valley Air Pollution Control Districts (SJVAPCD) adopted thresholds for these pollutants)?			Х	
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			Х	
c) Expose sensitive receptors to substantial pollutant concentrations?			Х	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			Х	

#### DISCUSSION

#### a) Conflict with or obstruct implementation of the applicable air quality plan?

**Less Than Significant Impact.** The analysis in the Air Quality Resource section is based off the Air Quality, Health Risk Analysis, Greenhouse, and Energy Technical Memorandum (Memo) prepared by Johnson Johnson and Miller Air Quality Consulting Services. The Memo is provided in its entirety in Appendix A.

Air Quality Plans (AQPs) are plans for reaching attainment of air quality standards. The assumptions, inputs, and control measures are analyzed to determine if the Air Basin can reach attainment for the ambient air quality standards. The proposed Project site is located within the jurisdictional boundaries of the SJVAPCD. To show attainment of the standards, the SJVAPCD analyzes the growth projections in the Valley, contributing factors in air pollutant emissions and formations, and existing and adopted emissions controls. The SJVAPCD then formulates a control strategy to reach attainment that includes both State and SJVAPCD regulations and other local programs and measures.

The CEQA Guidelines indicate that a significant impact would occur if the project would conflict with or obstruct implementation of the applicable air quality plan. The GAMAQI indicates that projects that do not exceed SJVAPCD regional criteria pollutant emissions quantitative thresholds would not conflict with or obstruct the applicable AQP.

#### Construction Emissions (Regional)

Construction emissions associated with the project are shown in Table 1. As shown in Table , the emissions are below the significance thresholds and, therefore, are less than significant on a project basis.

Emissions	Emissions (Tons/Year)					
Source	ROG	NOx	со	SOx	<b>PM</b> 10	PM <sub>2.5</sub>
Site Preparation	0.02	0.17	0.10	<0.01	0.05	0.03
Grading	0.06	0.62	0.45	<0.01	0.09	0.05
Building Construction	0.25	2.00	2.23	0.01	0.28	0.13
Paving	0.02	0.11	0.15	<0.01	0.01	0.01
Architectural Coating	0.45	0.02	0.03	<0.01	<0.01	<0.01
Project Total	0.80	2.92	2.96	0.01	0.44	0.22
Significance Thresholds	10	10	100	27	15	15
Exceed Significance Thresholds?	No	No	No	No	No	No

 Table 1: Summary of Construction-Generated Emissions of Criteria Air Pollutants –

 Unmitigated

Notes:

PM<sub>10</sub> and PM<sub>2.5</sub> emissions are from the mitigated output to reflect compliance with Regulation VIII—Fugitive PM<sub>10</sub> Prohibitions. Source of Emissions: CalEEMod Output and Additional Supporting Information (Attachment A of Appendix A).

Totals may not appear to sum exactly due to rounding.

Source of Thresholds: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed November 30, 2021.

#### **Operational Emissions (Regional)**

Operational emissions occur over the lifetime of the project. The SJVAPCD considers construction and operational emissions separately when making significance determinations.

The emissions output for project operation at full buildout for 2023 are summarized in Table 2. As provided in Table 2, the operational emissions would be less than the thresholds of significance for all criteria air pollutants.

0	Emissions (tons/year)					
Source	ROG	NOx	СО	SOx	<b>PM</b> <sub>10</sub>	PM <sub>2.5</sub>
Area	0.72	<0.01	<0.01	<0.01	<0.01	<0.01
Energy	0.02	0.15	0.13	<0.01	0.01	0.01
Mobile (Passenger Vehicles)	0.06	0.06	0.66	<0.01	0.22	0.06
Mobile (Trucks)	0.06	4.85	0.70	0.02	0.78	0.25
Yard Tractor	<0.001	0.027	<0.001	<0.001	0.002	0.002
Annual Total (2023)	0.86	5.09	1.49	0.02	1.01	0.32
Significance Thresholds	10	10	100	27	15	15
Exceed Significance Thresholds?	No	No	No	No	No	No
Notes:						

Table 2: Summary of Operational Emissions of Criteria Air Pollutants – Unmitigated

Emissions were quantified using CalEEMod based on project details and estimated operating year for the proposed project. Totals may not sum exactly due to rounding.

Source: CalEEMod Output and Additional Supporting Information (Attachment A of Appendix A).

As shown above in Table 1 and Table 2, the project's construction and operational regional emissions would not exceed SJVAPCD's regional criteria pollutant emissions quantitative thresholds. Therefore, the proposed project would not be considered in conflict with or obstruct implementation of the applicable air quality plan. The impact would be less than significant.

# b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less Than Significant Impact. To result in a less than significant impact, emissions of nonattainment pollutants must be below the SJVAPCD's regional significance thresholds. This is an approach recommended by the SJVAPCD's in its GAMAQI. The primary pollutants of concern during project construction and operation are ROG, NO<sub>X</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. The SJVAPCD GAMAQI adopted in 2015 contains thresholds for CO, NO<sub>X</sub>, ROG, SO<sub>X</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>.

#### Localized Impacts

Emissions occurring at or near the project have the potential to create a localized impact also referred to as an air pollutant hotspot. Localized emissions are considered significant if, when combined with background emissions, they would result in exceedance of any health-based air quality standard. In locations that already exceed standards for these pollutants, significance is based on a significant impact level (SIL) that represents the amount that is considered a cumulatively considerable contribution to an existing violation of an air quality standard. The pollutants of concern for localized impact in the SJVAB are NO<sub>2</sub>, SO<sub>x</sub>, and CO.

The SJVAPCD has provided guidance for screening localized impacts in the GAMAQI that establishes a screening threshold of 100 pounds per day of any criteria pollutant. If a project exceeds 100 pounds per day of any criteria pollutant, then ambient air quality modeling would be necessary. If the project does not exceed 100 pounds per day of any criteria pollutant, then it can be assumed that it would not cause a violation of an ambient air quality standard.

#### Construction: Localized Concentrations of PM<sub>10</sub>, PM<sub>2.5</sub>, CO, and NO<sub>X</sub>

Local construction impacts would be short-term in nature lasting only during the duration of construction. As shown in Table 3 below, on-site construction emissions would be less than 100 pounds per day for each of the criteria pollutants. To present a conservative estimate, on-site emissions for on-road construction vehicles were included in the localized analysis. Based on the SJVAPCD's guidance, the construction emissions would not cause an ambient air quality standard violation.

Courses	On-site Emissions (pounds per day)					
Source	NOx	со	PM10	PM <sub>2.5</sub>		
Site Preparation	33.20	19.91	10.47	6.03		
Grading	39.26	29.47	5.80	3.15		
Building Construction	16.86	18.50	0.91	0.79		
Paving	11.21	14.74	0.58	0.52		
Architectural Coating	1.50	2.14	0.10	0.09		
Overlap Paving & Building Construction	28.07	33.25	1.48	1.32		
Maximum Daily On-site Emissions	39.26	33.25	10.47	6.03		
Significance Thresholds	100	100	100	100		
Exceed Significance Thresholds?	No	No	No	No		

#### Table 3: Localized Concentrations of PM<sub>10</sub>, PM<sub>2.5</sub>, CO, and NO<sub>X</sub> for Construction

Note: Overlap of construction activities is based on the construction schedule shown in Table 4 of Appendix A and Attachment A of Appendix A.

Source of Emissions: CalEEMod Output and Additional Supporting Information (Attachment A of Appendix A).

Source of Thresholds: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: <u>https://www</u>.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed November 30, 2021.

#### Operation: Localized Concentrations of PM<sub>10</sub>, PM<sub>2.5</sub>, CO, and NO<sub>X</sub>

Localized impacts could occur in areas with a single large source of emissions such as a power plant or with multiple sources concentrated in a small area such as a distribution center. The maximum daily operational emissions would occur at project buildout, which was assumed to occur in 2023. Operational emissions include those generated on-site by area sources such as consumer products, and landscape maintenance, energy use from natural gas combustion, and motor vehicles operation at the project site. Motor vehicle emissions are estimated for on-site operations using trip lengths for on-site travel. The trip lengths used to analyze on-site emissions was selected by measuring possible on-site paths using Google Earth; the length for the longest measured route was selected to present a conservative estimate of on-site emissions.

As shown in Table 4 below, Operational modeling of on-site emissions for the project indicate that the project would not exceed 100 pounds per day for each of the criteria pollutants. Therefore, based on the SJVAPCD's guidance, the operational emissions would not cause an ambient air quality standard violation. As such, impacts would be

less than significant.

Courses	On-site Emissions (pounds per day)					
Source	NOx	со	<b>PM</b> 10	PM <sub>2.5</sub>		
Area	<0.01	0.04	<0.01	<0.01		
Energy	0.82	0.69	0.06	0.06		
Mobile – Passenger Vehicles Trips	0.13	1.47	0.07	0.02		
Mobile – Truck Trips	2.05	1.60	0.04	0.01		
Yard Tractor	0.15	<0.01	0.01	0.01		
Total	3.15	3.80	0.18	0.10		
Significance Thresholds	100	100	100	100		
Exceed Significance Thresholds?	No	No	No	No		

#### Table 4: Localized Concentrations of PM<sub>10</sub>, PM<sub>2.5</sub>, CO, and NO<sub>x</sub> for Operations

Source of Emissions: CalEEMod Output and Additional Supporting Information (Attachment A of Appendix A). Maximum daily emissions of NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> were highest in the Winter scenario.

Source of Thresholds: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed November 30, 2021.

Air pollutant emissions have both regional and localized effects. As shown in Table 3 and Table 4, the project's regional emissions would not exceed the applicable regional criteria pollutant emissions quantitative thresholds and impacts would be *less than significant*.

#### c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. Emissions occurring at or near the project have the potential to create a localized impact that could expose sensitive receptors to substantial pollutant concentrations. The SJVAPCD considers a sensitive receptor to be a location that houses or attracts children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Examples of sensitive receptors include hospitals, residences, convalescent facilities, and schools. The surrounding land uses and closest sensitive receptors for the proposed project are described below.

• North – To the north of the project site is a United States Air Force Base, with an airport to the northwest.

• South – To the south of the project site are various industrial and commercial uses, followed by residential development.

• East – To the east of the project site various industrial and commercial uses, followed by an RV repair shop.

• West – To the west of the project site are industrial land uses, followed by commercial land uses (including hotels) further west and northwest and residential development to the southwest.

There is a military base to the north of the Project, with a building that may be a barracks approximately 640 feet northeast of the Project site. This was assumed to be a residential sensitive receptor in localized air quality analysis presented in this memorandum. The next closest sensitive receptors include apartments located approximately 744 feet southwest of the project site and single-family homes located approximately 772 feet south of the project site. In addition, hotels within approximately 1,000 feet of the project site were also represented as sensitive receptors in the localized air quality analysis presented in this memorandum.

The SJVAPCD's GAMAQI includes screening thresholds for identifying projects that need detailed analysis for localized impacts. Projects with on-site emission increases from construction activities or operational activities that exceed the 100 pounds per day screening level of any criteria pollutant after implementation of all enforceable mitigation measures would require additional analysis to determine if the preparation of an ambient air quality analysis is needed. The criteria pollutants of concern for localized impact in the Air Basin are PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>x</sub>, and CO. There is no localized emission standard for ROG.

As shown in Table 4, the Project would not exceed the emission screening thresholds during project construction. Therefore, the project's localized criteria pollutant impacts from construction of the project would be less than significant.

As shown in Table 4, the Project would not exceed SJVAPCD screening thresholds for localized criteria pollutant impacts; therefore, the Project's localized criteria pollutant impacts from long-term operations would be less than significant.

#### **Toxic Air Contaminants**

#### **Construction**

Project construction would involve the use of diesel-fueled vehicles and equipment that emit DPM, which is considered a TAC. The SJVAPCD's current threshold of significance for TAC emissions is an increase in cancer risk for the maximally exposed individual of 20 in a million (formerly 10 in a million). The SJVAPCD's 2015 GAMAQI does not currently recommend analysis of TAC emissions from project construction activities, but instead focuses on projects with operational emissions that would expose sensitive receptors over a typical lifetime of 70 years. In addition, the most intense construction activities of the project's construction would occur during site preparation and grading phases over a short period. Building construction, especially for tilt-up buildings commonly used for new construction of warehouse-style buildings, typically requires limited amounts of diesel equipment relative to site clearing activities.

#### **Operations**

For reasons previously discussed (see Modeling Parameters and Assumptions), an analysis of TACs (including DPM) was performed using the EPA-approved AERMOD model, which is an air dispersion model accepted by the SJVAPCD for preparing HRAs. AERMOD version 19191 was used for this analysis. Consistent with SJVAPCD guidance, the health risk computation was performed to determine the risk of developing an excess cancer risk calculated on a 70-year exposure scenario. Results of the HRA are summarized in Table 5. The complete HRA prepared for the proposed project, including calculations and AERMOD output data, are included in Attachment B of Appendix A.

Exposure Scenario	Maximum Cancer Risk (Risk per Million)	Chronic Non-Cancer Hazard Index			
70-Year Exposure at the DPM MER (from DPM Emissions)	0.3	0.00006			
Applicable Threshold of Significance	20	1			
Threshold Exceeded?	No	No			
Notes: MER = Maximally Exposed Receptor Home Avenue Warehouse Project Operational Total DPM MER UTM: 257324.48, 4072070.86					

# Table 5: Summary of the Health Impacts from Operations of the Proposed Project (70-year Scenario)

257324.26, 4072085.47 257324.04, 4072100.08 Three sets of coordinates are listed because the highest concentration was found at all three of these locations. Source: Attachment B of Appendix A.

As shown in Table 5, the project would not exceed the cancer risk, chronic risk, and acute risk threshold levels. The primary source of the emissions responsible for chronic risk are from diesel trucks. DPM does not have an acute risk factor. Since the project does not exceed the applicable SJVAPCD thresholds for cancer risk, acute risk, or chronic risk, the impact related to the project's potential to expose sensitive receptors to substantial pollutant concentrations would be less than significant.

#### Valley Fever

Valley fever, or coccidioidomycosis, is an infection caused by inhalation of the spores of the fungus, *Coccidioides immitis* (*C. immitis*). The spores live in soil and can live for an extended time in harsh environmental conditions. Activities or conditions that increase the amount of fugitive dust contribute to greater exposure, and they include dust storms, grading, and recreational off-road activities.

The San Joaquin Valley is considered an endemic area for Valley fever. The San Joaquin Valley is considered an endemic area for Valley fever. During 2000–2018, a total of 65,438 coccidioidomycosis cases were reported in California; median statewide annual incidence was 7.9 per 100,000 population and varied by region from 1.1 in Northern and Eastern California to 90.6 in the Southern San Joaquin Valley, with the largest increase (15-fold) occurring in the Northern San Joaquin Valley. Incidence has been consistently high in six counties in the Southern San Joaquin Valley (Fresno, Kern, Kings, Madera, Tulare, and Merced counties) and Central Coast (San Luis Obispo County) regions.<sup>1</sup> California experienced 6,490 new cases of Valley fever in 2020. A total of 466 Valley fever cases were reported in Fresno County in 2020.<sup>2</sup>

The distribution of *C. immitis* within endemic areas is not uniform and growth sites are commonly small (a few tens of meters) and widely scattered. Known sites appear to have

<sup>1</sup> Centers for Disease Control and Prevention (CDC). 2020. Regional Analysis of Coccidioidomycosis Incidence—California, 2000– 2018. Website: https://www.cdc.gov/mmwr/volumes/69/wr /mm6948a4.htm?s\_cid=mm6948a4\_e. Accessed March 17, 2021.

<sup>2</sup> California Department of Public Health (CDPH). 2021. Coccidioidomycosis in California Provisional Monthly Report January 2021. Website: https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/CocciinCA ProvisionalMonthlyReport.pdf. Accessed October 5, 2021.

some ecological factors in common suggesting that certain physical, chemical, and biological conditions are more favorable for *C. immitis* growth. Avoidance, when possible, of sites favorable for the occurrence of *C. immitis* is a prudent risk management strategy. Listed below are ecologic factors and sites favorable for the occurrence of *C. immitis* is a prudent risk management strategy.

1) Rodent burrows (often a favorable site for *C. immitis*, perhaps because temperatures are more moderate and humidity higher than on the ground surface)

2) Old (prehistoric) Indian campsites near fire pits

- 3) Areas with sparse vegetation and alkaline soils
- 4) Areas with high salinity soils
- 5) Areas adjacent to arroyos (where residual moisture may be available)
- 6) Packrat middens
- 7) Upper 30 centimeters of the soil horizon, especially in virgin undisturbed soils
- 8) Sandy, well-aerated soil with relatively high water-holding capacities

Sites within endemic areas less favorable for the occurrence of *C. immitis* include:

- 1) Cultivated fields
- 2) Heavily vegetated areas (e.g., grassy lawns)
- 3) Higher elevations (above 7,000 feet)
- 4) Areas where commercial fertilizers (e.g., ammonium sulfate) have been applied
- 5) Areas that are continually wet
- 6) Paved (asphalt or concrete) or oiled areas
- 7) Soils containing abundant microorganisms
8) Heavily urbanized areas where there is little undisturbed virgin soil.3

The project is situated on a site previously disturbed that does not provide a suitable habitat for spores. Specifically, the project site has been previously disturbed and is occupied by vegetation in the form of grass and shrubbery. Therefore, implementation of the proposed project would have a low probability of the site having *C. immitis* growth sites and exposure to the spores from disturbed soil.

Although conditions are not favorable, construction activities could generate fugitive dust that contain *C. immitis* spores. The project will minimize the generation of fugitive dust during construction activities by complying with SJVAPCD's Regulation VIII. Therefore, this regulation, combined with the relatively low probability of the presence of *C. immitis* spores would reduce Valley fever impacts to less than significant.

During operations, dust emissions are anticipated to be relatively small, because most of the project area would be occupied by the proposed warehouse building and pavement. This condition would lessen the possibility of the project from providing habitat suitable for *C. immitis* spores and for generating fugitive dust that may contribute to Valley fever exposure. Impacts would be less than significant.

#### Naturally Occurring Asbestos

Review of the map of areas where naturally occurring asbestos in California are likely to occur found no such areas in the project area. Therefore, development of the project is not anticipated to expose receptors to naturally occurring asbestos.4 Impacts would be less than significant.

#### Impact Analysis Summary

In summary, the project would not exceed SJVAPCD localized emission daily screening levels for any criteria pollutant. The project is not a significant source of TAC emissions during construction or operation. The project is not in an area with suitable habitat for

<sup>3</sup> United States Geological Survey (USGS). 2000. Operational Guidelines (Version 1.0) for Geological Fieldwork in Areas Endemic for Coccidioidomycosis (Valley Fever), 2000, Open-File Report 2000-348. Website: https://pubs.usgs.gov/of/2000/0348/pdf/of00-348.pdf. Accessed November 8, 2021.

<sup>4</sup> U.S. Geological Survey. 2011. Van Gosen, B.S., and Clinkenbeard, J.P. California Geological Survey Map Sheet 59. Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California. Open-File Report 2011-1188 Website: https://pubs.usgs.gov/of/2011/1188/. Accessed November 29, 2021.

Valley fever spores and is not in area known to have naturally occurring asbestos. Therefore, the project would not result in significant impacts to sensitive receptors.

# d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

**Less Than Significant Impact.** Two situations create a potential for odor impact. The first occurs when a new odor source is located near an existing sensitive receptor. The second occurs when a new sensitive receptor locates near an existing source of odor. The proposed project is of the first type only since it involves a potential new odor source and would not locate any new sensitive receptors.

Odor impacts on residential areas and other sensitive receptors, such as hospitals, day-care centers, schools, etc. warrant the closest scrutiny, but consideration should also be given to other land uses where people may congregate, such as recreational facilities, worksites, and commercial areas.

Although the project is less than one mile from the nearest sensitive receptor, the project is not expected to be a significant source of odors. The screening levels for these land use types are shown in Table 6.

Odor Generator	Screening Distance			
Wastewater Treatment Facilities	2 miles			
Sanitary Landfill	1 mile			
Transfer Station	1 mile			
Composting Facility	1 mile			
Petroleum Refinery	2 miles			
Asphalt Batch Plant	1 mile			
Chemical Manufacturing	1 mile			
Fiberglass Manufacturing	1 mile			
Painting/Coating Operations (e.g., auto body shop)	1 mile			
Food Processing Facility	1 mile			
Feed Lot/Dairy	1 mile			
Rendering Plant	1 mile			
Wastewater Treatment Facilities	2 miles			
Source of Thresholds: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating				

 Table 6: Screening Levels for Potential Odor Sources

air.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed September 20, 2021.

#### Construction

During construction, various diesel-powered vehicles and equipment in use on-site would create localized odors. These odors would be temporary and intermittent, which would decrease the likelihood of the odors concentrating in a single area or lingering for any notable period of time. As such, these odors would likely not be noticeable for extended periods of time beyond the project's site boundaries. The potential for odor impacts from construction of the proposed project would, therefore, be less than significant.

## **Operations**

The development of the proposed project would not substantially increase objectionable odors in the area and would not introduce any new sensitive receptors to the area that could be affected by any existing objectionable odor sources in the area. Land uses that are typically identified as sources of objectionable odors include landfills, transfer stations, sewage treatment plants, wastewater pump stations, composting facilities, asphalt batch plants, rendering plants, and other land uses outlined in Table . The proposed project would not engage in any of these activities. Minor sources of odors that would be associated with typical warehouse and light industrial uses, such as exhaust from mobile sources, are known to have temporary and less concentrated odors. Considering the low intensity of potential odor emissions, the proposed project's operational activities would not expose receptors to objectionable odor emissions. Therefore, the proposed project would not be considered to be a generator of objectionable odors during operations. As such, impacts would be *less than significant*.

#### Mitigation Measures

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact Would the pro	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			Х	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?				х
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			Х	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			Х	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				Х

#### DISCUSSION

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

Less than Significant Impact. The site is currently vacant land with minimal vegetation and was historically used for agricultural purposes. It has been regularly disked and cultivated. The immediate vicinity consists of land developed for airport, industrial purposes, and roadways. The highly disturbed nature of the area suggests that the vegetation on site is unlikely to follow natural vegetation patterns, and thus unlikely to support native wildlife.

The City of Fresno Program Environmental Impact Report defines the Project area as Light Industrial where land is developed and considered to provide poor quality habitat for any special status species. No special status species are expected to occur in this area. No mitigation measures are recommended, and thus any impacts remain *less than significant*.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

**No Impact.** There are no riparian habitats or other sensitive natural communities identified in local or regional plans, policies, or regulation or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service in the subject site. Additionally, there are no natural waterways or sensitive natural communities on the subject site or in the immediate vicinity. As such, there is *no impact.* 

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

**No Impact.** There are no state or federally protected wetlands on the subject site. As such, there is *no impact.* 

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

**Less Than Significant Impact.** There are no natural waterways or natural vegetation on the subject site, and the site is not used for movement of wildlife species or for a migratory wildlife corridor, nor is the site used for native wildlife nursery sites, as the site is completely surrounded by urban development. The site has been farmed previously and is highly disturbed. There would be a *less than significant impact* to native species movement.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

**Less Than Significant Impact.** The City's General Plan Parks, Open Space, and Schools Element contains several objectives and policies pertaining to the protection of biological resources. Most of the policies pertain to general long-term protection and preservation of biological resources including providing buffers for natural areas, implementing habitat restoration where applicable, protection/enhancement of the San Joaquin River area, and other similar policies. Since the Project is located in a highly disturbed area with minimal biological resources and does not include significant impacts to protected plant or animal species, the Project does not conflict with any adopted policies pertaining to biological resources. The Project is also required to implement Municipal Code Chapter 13 Article 3 – Street Trees and Parkways pertaining to tree removal and replacement. Therefore, there is a *less than significant impact*.

## f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

**No Impact.** The Project site is not subject to any adopted habitat conservation plan, natural community conservation plan or other conservation plan, as there are no adopted plans. Therefore, there is *no impact*.

#### Mitigation Measures

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES – Would the project:				

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?		Х		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		Х		
c) Disturb any human remains, including those interred outside of formal cemeteries?		Х		

#### DISCUSSION

# a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

**Less Than Significant Impact with Mitigation.** A prehistoric and historic site records and literature search was conducted for the Project area through the Southern San Joaquin Valley Information Center of the California Historical Resources Information System on November 12, 2021 (File RS#21-441). Records indicated that there have been no previous cultural resources studies conducted within the Project area. There have been four studies conducted within a one-half mile radius (see Appendix B). A review of the Sacred Lands Inventory by the Native American Heritage Commission (NAHC) was also performed and the results were negative.

There are no previously recorded cultural resources within the Project area. Furthermore, it is not known if any currently exist there. Twelve resources recorded within one-half mile radius are historical properties; P-10-005049, 005050, 005051, 005052, 005053, 005054, 005055, 005056, 005057, 005058, 005059, 005060.

Although no cultural or archaeological resources, paleontological resources or human remains have been identified in the project area to date, the possibility exists that such resources or remains may be discovered during Project site preparation, excavation and/or grading activities. Mitigation Measures CUL – 1.1 from the General Plan PEIR requires construction activities to stop if unknown resources are encountered until a qualified historical resources specialist can make recommendations to the City. Adherence to this mitigation measure will result in a *less than significant impact*.

# b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

**Less Than Significant Impact with Mitigation**. As discussed in Impact a) above, no surface or recorded evidence of sensitive cultural resources have been recorded. However, the possibility exists that such resources or remains may be discovered during Project site preparation, excavation and/or grading activities. Mitigation Measure CUL – 1.1 of the General Plan Program EIR will be implemented to ensure that Project will result in *less than significant impact*.

# c) Disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant Impact with Mitigation. Although no cultural or archaeological resources, paleontological resources or human remains have been identified in the Project area yet, the possibility exists that such resources or remains may be discovered during Project site preparation, excavation and/or grading activities. As discussed above, Mitigation Measures CUL - 1.1 from the General Plan PEIR requires construction activities to stop if unknown resources are encountered until a qualified historical resources specialist can make recommendations to the City.

Additionally, Mitigation Measure CUL – 3 from the General Plan PEIR requires construction activities to cease immediately after human remains are unearthed until the County Coroner has made the necessary findings as to origin and disposition of the remains. Adherence to these mitigation measures will result in a *less than significant impact.* 

#### Mitigation Measures

- 1. The proposed project shall implement and incorporate the cultural resource related mitigation measures as identified in the attached Project Specific Mitigation Monitoring Checklist dated September 23, 2022.
  - CUL-1.1: If previously unknown resources are encountered before or during grading activities, construction shall stop in the immediate vicinity of the find and a qualified historical resources specialist shall be consulted to determine whether the resource requires further study. The qualified historical resources specialist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines and the City's Historic Preservation Ordinance. If the resources are determined to be unique historical resources as defined under Section 15064.5 of the CEQA Guidelines, measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any historical artifacts recovered as a result of mitigation shall be provided to a City-approved institution or person who is capable of providing long-term preservation to allow future scientific study.
  - CUL-3: In the event that human remains are unearthed during excavation and grading activities of any future development project, all activity shall cease immediately. Pursuant to Health and Safety Code (HSC) Section 7050.5, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC

Section 5097.98(a). If the remains are determined to be of Native American descent, the coroner shall within 24 hours notify the Native American Heritage Commission (NAHC). The NAHC shall then contact the most likely descendent of the deceased Native American, who shall then serve as the consultant on how to proceed with the remains. Pursuant to PRC Section 5097.98(b), upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. ENERGY – Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			Х	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			х	

## DISCUSSION

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

**Less Than Significant Impact.** The energy requirements for the proposed project were determined using the construction and operational estimates generated from the Modeling Assumptions as noted in the Air Quality, Health Risk Analysis, Greenhouse, and Energy Technical Memo, performed on behalf of the Project by Johnson, Johnson & Miller Air Quality Consulting Services, report date December 8, 2021 (Appendix A).

#### **Construction Energy Demand**

As summarized in Table 7 and Table 8, the proposed project would require 16,658 gallons of diesel fuel for construction off-road equipment and 30,078 gallons of gasoline and diesel for on-road vehicles during construction. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or other parts of the state. In addition, the overall construction schedule and process is already designed to be efficient in order to avoid excess monetary costs. For example, equipment and fuel are not typically used wastefully due to the added expense associated with renting the equipment, maintaining it, and fueling it. Therefore, it is expected that construction fuel consumption associated with the proposed project

would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region, and as such, impacts would be less than significant.

Project Component	Construction Activity	Fuel Consumption (gallons)		
Home Avenue Warehouse	Site Preparation	703		
Project (On-site, Off-road	Grading	3,874		
Equipment Use)	Building Construction	11,114		
	Paving	843		
	Architectural Coating	124		
Total		16,658		
Note: Totals may not appear to sum correctly due to rounding				
Source: Energy Consumption Calculations (Attachment C of Appendix A).				

 Table 7: Construction Off-Road Fuel Consumption

#### Table 8: Construction On-Road Fuel Consumption

Project Component	Total Annual Fuel Consumption (gallons)		
Site Preparation	205		
Grading	1,809		
Building Construction	27,464		
Paving	224		
Architectural Coating	376		
Total	30,078		
Note: Totals may not appear to sum correctly due to rounding	g		
Source: Energy Consumption Calculations (Attachment C of Appendix A).			

#### Long-Term Energy Demand

#### Building Energy Demand

Buildings and infrastructure constructed pursuant to the proposed project would comply with the versions of CCR Titles 20 and 24, including California Green Building Standards (CALGreen), that are applicable at the time that building permits are issued. The proposed project is estimated to demand 1,644,226 KWhr of electricity per year and 3,044,700 KBTU of natural gas per year. This would represent an increase in demand for electricity and natural gas.

It would be expected that building energy consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than for any other similar buildings in the region. Current state regulatory requirements for new building construction contained in the 2019 CALGreen and Title 24 standards would increase energy efficiency and reduce energy demand in comparison to existing commercial structures, and therefore would reduce actual environmental effects associated with energy use from the proposed project. Additionally, the CALGreen and Title 24 standards have increased efficiency standards through each update.

Therefore, while the proposed project would result in increased electricity and natural gas demand, the electricity and natural gas would be consumed more efficiently and would be typical of existing industrial development.

Based on the above information, the proposed project would not result in the inefficient or wasteful consumption of electricity or natural gas, and impacts would be less than significant.

## Transportation Energy Demands

The daily vehicular fuel consumption is estimated to be 724 gallons of both gasoline and diesel fuel. Annual consumption is estimated at 264,383 gallons. In addition, the proposed project would constitute development within an established community and would not be opening a new geographical area for development. As such, the proposed project would not result in unusually long trip lengths for future employees, vendors, or visitors. The property is located at 5255 East Home Avenue, Fresno, CA 93727 -APN: 455-201-24, APN: 455-201-38 and is zoned as IL-Light Industrial with similar planned use. The proposed Project would be well-positioned to accommodate an existing community. Vehicles accessing the site would be typical of vehicles accessing similar warehouse-type uses in the City of Fresno and surrounding areas. For these reasons, it would be expected that vehicular fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than for any other similar land use activities in the region, and impacts would be *less than significant.* 

# b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

**Less Than Significant Impact**. The Fresno General Plan contains the following implementing policies related to energy conservation that are relevant to the proposed project.<sup>5</sup>

- **RC-5-b Greenhouse Gas Reduction Plan.** As is consistent with State law, prepare and adopt a Greenhouse Gas Reduction Plan as part of the Program Environmental Impact Report to be concurrently approved with the Fresno General Plan in order to achieve compliance with State mandates, assist development by streamlining the approval process, and focus on feasible actions the City can take to minimize the adverse impacts of growth and development on global climate change. The Greenhouse Gas Reduction Plan shall include, but not be limited to:
  - A baseline inventory of all known or reasonably discoverable sources of GHGs that currently exist in the city and sources that existed in 1990.
  - A projected inventory of the GHGs that can reasonably be expected to be emitted from those sources in the year 2035 with implementation of this General Plan and foreseeable communitywide and municipal operations.
  - A target for the reduction of emissions from those identified sources.
  - A list of feasible GHG reduction measures to meet the reduction target, including energy conservation and "green building" requirements in municipal buildings and private development.
  - Periodically update municipal and community-wide GHG emissions inventories to determine the efficacy of adopted measures and to guide future policy formulation needed to achieve and maintain GHG emissions reduction targets.
- **RC-5-c GHG Reduction through Design and Operations.** Increase efforts to incorporate requirements for GHG emission reductions in land use entitlement decisions, facility design, and operational measures subject to City regulation through the following measures and strategies:

<sup>5</sup> City of Fresno. 2014. City of Fresno General Plan. December. Website: https://www.fresno.gov/darm/general-plandevelopment-code/. Accessed November, 2021.

- Promote the expansion of incentive-based programs that involve certification of projects for energy and water efficiency and resiliency. These certification programs and scoring systems may include public agency "Green" and conservation criteria, Energy Star™ certification, CALGreen Tier 1 or Tier 2, Leadership in Energy Efficient Design (LEED™) certification, etc.
- Promote appropriate energy and water conservation standards and facilitate mixed-use projects, new incentives for infill development, and the incorporation of mass transit, bicycle and pedestrian amenities into public and private projects.
- Require energy and water audits and upgrades for water conservation, energy efficiency, and mass transit, pedestrian, and bicycle amenities at the time of renovation, change in use, change in occupancy, and change in ownership for major projects meeting review thresholds specified in an implementing ordinance.
- Incorporate the City's "Guidelines for Ponding Basin/Pond Construction and Management to Control Mosquito Breeding" as conditions of approval for any project using an on-site stormwater basin to prevent possible increases in vector-borne illnesses associated with global climate change.
- Periodically evaluate the City's facility maintenance practices to determine whether there are additional opportunities to reduce GHGs through facility cleaning and painting, parks maintenance, road maintenance, and utility system maintenance.
- Periodically evaluate standards and mitigation strategies for highly vehicle-dependent land uses and facilities, such as drive-through facilities and auto-oriented development.
- **RC-5-f Toolkit.** Provide residents and project applicants with a "toolkit" of generally feasible measures that can be used to reduce GHG emissions, including educational materials on energy-efficient and "climate-friendly" products.
- **RC-8-a Existing Standards and Programs.** Continue existing beneficial energy conservation programs, including adhering to the California Energy Code in new construction and major renovations.
- **RC-8-b Energy Reduction Targets.** Strive to reduce per capita residential electricity use to 1,800 kWh per year and non-residential electricity use to

2,700 kWh per year per capita by developing and implementing incentives, design and operation standards, promoting alternative energy sources, and cost-effective savings.

- **RC-8-c Energy Conservation in New Development.** Consider providing an incentive program for new buildings that exceed California Energy Code requirements by fifteen percent.
- **RC-8-e Energy Use Disclosure.** Promote compliance with State law mandating disclosure of a building's energy data and rating of the previous year to prospective buyers and lessees of the entire building or lenders financing the entire building.

While several of these policies are voluntary or cannot be implemented by an individual development project, compliance with Title 24 standards would ensure that the proposed project would not conflict with any of the General Plan energy conservation policies related to the proposed project's building envelope, mechanical systems, and indoor and outdoor lighting. In addition, the proposed project would constitute development within an established community and would not be opening a new geographical area for development such that it would not result in unusually long trip lengths for future employees or vendors.

For the above reasons, the proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and impacts would be *less than significant*.

#### Mitigation Measures

None required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS - Wor	uld the project	:		
a) Directly or Indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			Х	
ii) Strong seismic ground shaking?			х	
iii) Seismic-related ground failure, including liquefaction?			х	
iv) Landslides?			Х	
b) Result in substantial soil erosion or the loss of topsoil?			х	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			Х	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			х	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				x
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			х	

## DISCUSSION

a) Directly or indirectly cause potential substantial adverse effects, including

the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

**Less Than Significant Impact.** The proposed Project site is not located in an earthquake fault zone as delineated by the 1972 Alquist-Priolo Earthquake Fault Zoning Map Act. No active faults have been mapped within the Project boundaries, the nearest known potentially active fault is the Round Valley Fault, located approximately 68 miles northeast of the site. Any impacts would be *less than significant*.

#### ii. Strong seismic ground shaking?

**Less Than Significant Impact.** It is anticipated that the proposed Project site would be subject to some ground acceleration and ground shaking associated with seismic activity during its design life. The Project site would be engineered and constructed in strict accordance with the earthquake resistant design requirements contained in the latest edition of the California Building Code (CBC) for seismic zone III, as well as Title 24 of the California Administrative Code, and therefore would avoid potential seismically induced hazards on planned structures. The impact of strong seismic ground shaking on the Project would be *less than significant*.

#### iii. Seismic-related ground failure, including liquefaction?

**Less Than Significant Impact.** The potential for soil liquefaction within the City of Fresno ranges from very low to moderate due to the variable density of the subsurface soils and the presence of shallow groundwater (PEIR SCH No. 2019050005). The proposed Project will be subject to policies in the Fresno Municipal Code, including Sections 11-101, 12-1022 and 12-1023, which would

reduce potential settlement and lateral spread impacts to *less than significant* levels.

#### iv. Landslides?

Less Than Significant Impact. Landslides are the release of rock, soil, or other debris and its subsequent movement down a slope or hillside. Landslides occur during earthquakes, triggered by the strain induced in soil and rock by ground shaking vibrations, and during non-earthquake conditions, most frequently during the rainy season. Any slope of 15 degrees or greater is susceptible to mud or landslides. The project area is generally flat in nature. Additionally, the proposed Project site is not located in an earthquake fault zone as delineated by the 1972 Alguist-Priolo Earthquake Fault Zoning Map Act. The nearest known potentially active fault is the Round Valley Fault, located approximately 68 miles northeast of the site. No active faults have been mapped within the Project boundaries, so there is no potential for fault rupture. It is anticipated that the proposed Project site would be subject to some ground acceleration and ground shaking associated with seismic activity during its design life. The Project site would be engineered and constructed in strict accordance with the earthquake resistant design requirements contained in the latest edition of the California Building Code (CBC) for seismic zone III, as well as Title 24 of the California Administrative Code, and therefore would avoid potential seismically induced hazards on planned structures. The impact of seismic hazards on the Project would be less than significant.

#### b) Result in substantial soil erosion or the loss of topsoil?

**Less Than Significant Impact.** Construction activities associated with the Project involves ground preparation work for the new warehouse, parking lot, and the associated improvements. These activities could expose barren soils to sources of wind or water, resulting in the potential for erosion and sedimentation on and off the Project site. During construction, nuisance flow caused by minor rain could flow offsite. The City and/or contractor would be required to employ appropriate sediment and

erosion control BMPs as part of a Stormwater Pollution Prevention Plan (SWPPP) that would be required in the California National Pollution Discharge Elimination System (NPDES). In addition, soil erosion and loss of topsoil would be minimized through implementation of the SVJAPCD fugitive dust control measures (See Section III). Once construction is complete, the Project would not result in soil erosion or loss of topsoil. Adherence to local and state requirements will ensure that any impacts are *less than significant*.

1. c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

**Less Than Significant Impact.** As discussed in Impact a) above, the site is not at significant risk from earthquakes, ground shaking, liquefaction, or landslide and is otherwise considered geologically stable. Subsidence is typically related to over-extraction of groundwater from certain types of geologic formations where the water is partly responsible for supporting the ground surface. however, the City of Fresno is not recognized by the U.S. Geological Service as being in an area of subsidence.<sup>6</sup> Impacts are considered *less than significant*.

2. d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?

**Less Than Significant Impact.** Surface and near-surface soils throughout the city of Fresno consist of varying combinations of clays, silts, sands, gravels, and cobbles. The soil on the proposed Project site is comprised of Atwater sandy loam, moderately deep. This soil types are considered well drained with a low ability for water storage, which means they are unlikely to expand.<sup>7</sup> Any impacts are *less than significant*.

<sup>6</sup> U.S. Geological Service. Areas of Land Subsidence in California. <u>https://ca.water.usgs.gov/land\_subsidence/california-subsidence-areas.html</u>. Accessed November 2021.

<sup>&</sup>lt;sup>7</sup> USDA Natural Resources Conservation Service. Custom Soil Resource Report for Eastern Fresno Area, California.

# 3. e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

**No Impact**. The Project does not include the construction, replacement, or disturbance of septic tanks or alternative wastewater disposal systems. The Project will be required to tie into existing sewer services (See Utilities section for more details). Therefore, there is *no impact*.

# 4. f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

**Less Than Significant Impact with Mitigation.** As discussed previously in this document, there are no known cultural or historical resources on or near the site. (See Section V. for more details). The General Plan PEIR includes mitigation measures that will protect unknown (buried) resources during construction, including paleontological resources, and Mitigation Measures CUL-1.1 and CUL-3 are included in Section V. There are no unique geological features on site or in the area. Therefore, there is a *less than significant impact with mitigation.* 

#### Mitigation Measures

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS – Would the project				

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			Х	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			Х	

## DISCUSSION

# a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

**Less Than Significant Impact.** The analysis in the Greenhouse Gas section is based off the Air Quality, Health Risk Analysis, Greenhouse, and Energy Technical Memo prepared by Johnson Johnson and Miller Air Quality Consulting Services. The Memo is provided in its entirety in Appendix A.

To determine significance, the analysis first quantifies project-related GHG emissions under a business-as-usual scenario, and then compare these emissions with those emissions that would occur when all project-related design features are accounted for, and when compliance with applicable regulatory measures is assumed. The standards and methodology are explained in further detail, below.

#### Construction

GHG emissions generated during all phases of construction were combined and are shown in Table 9. The SJVAPCD does not have a recommendation for assessing the significance of construction related emissions, however, other jurisdictions such as the Sacramento Metropolitan Air Quality Management District (SMAQMD) have concluded that construction emissions should be included since they may remain in the atmosphere for years after construction is complete. The SMAQMD has established quantitative significance thresholds of 1,100 MT CO2e per year for the construction phases of land use projects. As such, annual construction emissions below the 1,100 MT CO2e would have a less than significant cumulative impact on GHGs.

Emissions Source	MT CO <sub>2e</sub> per Year			
Site Preparation	19			
Grading	100			
Building Construction	509			
Paving	22			
Architectural Coating	6			
Project Construction Total	657			
Significance Threshold 1,100				
Threshold Exceeded?	No			
Notes:				
MT CO <sub>2</sub> e = metric tons of carbon dioxide equivalent				
Totals summed using unrounded numbers; totals may not appear to sum exactly due to rounding.				
Source: CalEEMod Output and Additional Supporting Information (Attachment A of Appendix A).				

Table 9: Summary of Construction-Generated Greenhouse Gas Emissions

#### **Operations**

Operational or long-term emissions occur over the life of the project. Sources of emissions may include motor vehicles and trucks, energy usage, water usage, waste generation, and area sources, such as landscaping activities and residential woodburning. Operational GHG emissions associated with the proposed project were estimated using CalEEMod 2020.4.0. Please see the "Assumptions" sections of this technical report for details regarding assumptions and methodology used to estimate emissions. Complete CalEEMod output files and additional supporting information are also included in Attachment A.

## Business-as-Usual Operational Emissions

Operational emissions under the business-as-usual scenario were modeled using CalEEMod 2020.4.0. Modeling assumptions for the year 2005 were used to represent 2020 business as usual conditions (without the benefit of regulations adopted to reduce GHG emissions). The CARB and SJVAPCD guidance recommend using regulatory conditions in 2002-2004 in the baseline scenario to represent conditions as if regulations had not been adopted to allow the effect of projected growth on achieving reduction targets to be clearly defined. CalEEMod defaults were used for project energy usage, water usage, waste generation, and area sources (architectural coating, consumer products, and landscaping). The vehicle fleet mixes were revised to reflect the project fleet mix identified for the buildout year.

#### Buildout Year Operational Emissions

Operational emissions for the year 2023 were modeled using CalEEMod. CalEEMod assumes compliance with some, but not all, applicable rules and regulations regarding energy efficiency, vehicle fuel efficiency, renewable energy usage, and other GHG reduction policies, as described in the CalEEMod User's Guide.8

The reductions obtained from each regulation and the source of the reduction amount used in the analysis are described below.

The following regulations are incorporated into the CalEEMod emission factors:

- Pavley I and Pavley II (LEV III) motor vehicle emission standards
- CARB Medium and Heavy-Duty Vehicle Regulation
- 2005, 2008, 2013, 2016, and 2019 Title 24 Energy Efficiency Standards

<sup>8</sup> California Air Pollution Control Officers Association (CAPCOA). 2021. California Emission Estimator Model (CalEEMod) Version 2020.4.0 User's Guide. Website: <u>https://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/01\_user-39-s-guide2020-4-0.pdf?sfvrsn=6</u> Accessed November, 2021.

The following regulations have not been incorporated into the CalEEMod emission factors and require alternative methods to account for emission reductions provided by the regulations:

- Renewables Portfolio Standard (RPS) requirements for year 2030
- Green Building Code Standards (indoor water use)
- California Model Water Efficient Landscape Ordinance (outdoor water)
- CalRecycle 75 Percent Initiative (solid waste)

Title 24 reductions for 2013 and 2016 updates were added to CalEEMod 2016.3.2 and were carried into CalEEMod 2020.4.0. Title 24 reductions for 2019 were added to CalEEMod 2020.4.0.

RPS is not accounted for in CalEEMod 2020.4.0. Reductions from RPS for operational years 2030 and beyond are addressed by revising the electricity emission intensity factor in CalEEMod to account for the utility RPS rate forecast for 2030. The utilities will be required by SB 100 to increase the use of renewable energy sources to 60 percent by 2030. The latest power content label for PG&E was used to estimate a revised CO2 intensity factor for use in the modeling.

Reductions in emissions from solid waste are based on the County achieving the CalRecycle 75 Percent Initiative by 2020 compared with a 50 percent baseline for 2005.9 Reductions are taken using the CalEEMod mitigation component.

Energy savings from water conservation resulting from the Green Building Code Standards for indoor water use and California Model Water Efficient Landscape Ordinance for outdoor water use are not included in CalEEMod. The Water Conservation Act of 2009 mandates a 20 percent reduction in urban water use that is

<sup>9</sup> California Department of Resources Recycling and Recovery (CalRecycle). 2016b. California's 75 Percent Initiative: Defining the Future. Website: <u>https://www.calrecycle.ca.gov/75percent#:~:text=The%20Legislature%</u> 20and%20Governor%20Brown,decreasing%20California's%20reliance%20on%20landfills. Accessed November, 2021.

implemented with these regulations.10 Benefits of the water conservation regulations are applied in the CalEEMod mitigation component.

GHG reductions from some design features and compliance with regulations that are not otherwise accounted for can be quantified in CalEEMod. Note that CalEEMod nominally treats these design elements and conditions as "mitigation measures," despite their inclusion in the project description. Therefore, reported operational emissions are considered to represent unmitigated project conditions.

Operational GHG emissions by source are shown in Table 10. Full buildout of the project is anticipated to occur in 2023.

	Emissions (MT CO <sub>2</sub> e per year)		
Emission Source	Business as Usual Total Emissions (MT CO₂e per year)	Buildout Year (2023) Total Emissions with Regulations and Design Features (MT CO2e per year)	
Area	0.01	0.01	
Energy	740	317	
Mobile (Passenger Vehicles)	257	181	
Mobile (Trucks)	3,211	2,456	
Yard Tractor	108	108	
Waste	80	60	
Water	117	59	
Total	4,513	3,182	
Percent Reduction		29.5%	
City of Fresno GHG Reduction Plan Significance Threshold		21.7%	
SJVAPCD Recommended Significance Threshold		29%	
Exceeds Either Significance Threshold?		No	
MT $CO_2e$ = metric tons of carbon dioxide equivalent. Totals were calculated using unrounded emissions; totals may not appear to sum exactly due to rounding.			

Table 10: Unmitigated Project Operational GHG Emissions (Buildout Year Scenario)

<sup>10</sup> California Department of Water Resources (CDWR). 2013. California Water Plan Update 2013, Chapter 3 Urban Water Use Efficiency.

	Emissions (MT CO₂e per year)			
Emission Source	Business as Usual Total Emissions (MT CO₂e per year)	Buildout Year (2023) Total Emissions with Regulations and Design Features (MT CO2e per year)		
The project achieves the SJVAPCD 29 percent reduction from BAU threshold, and the 21.7 percent required to show consistency with AB 32 targets.				
Source of SJVAPCD Significance Threshold: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Final Draft Guidance for Assessing and Mitigating Air Quality Impacts. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed November 30, 2021.				
Source of Buildout Year Emissions: CalEEMod output for the year 2023 (Attachment A of Appendix A).				

As shown in Table 10, the proposed Project's total GHG annual emissions would not exceed applicable thresholds of significance in the project buildout (2023).

Emissions were assessed for full buildout operations in years 2023 and 2030. The 2030 scenario summarized in Table 11 was prepared to assess the Project's consistency with the SB 32 2030 target.

	Emissions (MT CO <sub>2</sub> e per year)		
Emission Source	2030 Year TotalEmissions withBusiness as UsualTotal Emissions (MTCO2e per year)(MT CO2e per year)		
Area	0.01	0.01	
Energy	740	302	
Mobile (Passenger Vehicles)	257	144	
Mobile (Trucks)	3,211	2,095	
Yard Tractor	108	108	
Waste	80	60	
Water	117	57	
Total	4,513	2,768	
Percent Reduction		38.7%	

Table 11: Unmitigated Project Operational GHG Emissions (Year 2030 Scenario)

	Emissions (MT CO <sub>2</sub> e per year)		
Emission Source	Business as Usual Total Emissions (MT CO₂e per year)	2030 Year Total Emissions with Regulations and Design Features (MT CO2e per year)	
City of Fresno GHG Reduction Plan Significance Threshold		21.7%	
Significance Threshold		29%	
Exceeds Either Significance Threshold?		No	
MT CO <sub>2</sub> e = metric tons of carbon dioxide equivalent. Totals were calculated using unrounded emissions; totals may not appear to sum exactly due to rounding. Source of Business-as-Usual Emissions: CalEEMod output for year 2005 (see Attachment A of Appendix A). Source of 2030 Emissions: CalEEMod output for the year 2030 (Attachment A of Appendix A).			

As shown in Table 10 and Table 11, the project would achieve a 29.5 percent reduction from BAU at project buildout (2023) and 38.7 percent reduction from BAU by the year 2030 with adopted regulations and design features incorporated. This is above the 29 percent reduction required by the SJVAPCD threshold, and the required 21.7 percent average reduction from all GHG emission sources to meet the AB 32 targets. The CARB originally identified a reduction of 29 percent from business as usual as needed to achieve AB 32 targets. The 2008 recession and slower growth in the years since 2008 have reduced the growth forecasted for 2020 and the amount needed to be reduced to achieve 1990 levels as required by AB 32; the target was revised to 21.7 percent.

The 29.5 percent reduction from BAU is 7.8 percent beyond the average reduction required by the State from all sources to achieve the AB 32 2020 target. This surplus addresses the Supreme Court's concern in the Newhall case that new development must do more than average to meet its fair share of emission reductions.

By 2030, the proposed project would achieve a 38.7 percent reduction from BAU or 17.0 percent above the 21.7 percent reduction necessary to meet the 2020 target. No new threshold has been adopted by the City of Fresno for the 2030 target, so in the interim the project must make continued progress toward the 2030 goal.

The Project's occupancy is anticipated to be fully built out in 2023, thus an additional analysis is provided to show consistency with post-2020 State legislative GHG goals. The SB 32 goal of 40 percent below 1990 emission levels by 2030 is the target established by the 2017 Scoping Plan Update.

The 2017 Scoping Plan includes new strategies that are not incorporated in the analysis above. Many measures that are likely to proceed include zero net energy buildings in future updates to Title 24 and enhanced motor vehicle fuel efficiency standards beyond 2025. The 2017 Scoping Plan identified an emission limit of 260 million metric tons of carbon dioxide equivalents (MMTCO2e). The 2030 BAU Inventory is estimated to be 392 MMTCO2e. The 2017 Scoping Plan identified that the bulk of its reductions would come from the Electric Power, Industrial fuel combustion, and Transportation. The continuance of the Cap and Trade would provide additional reductions. Although the 2017 Scoping Plan largely relies on state actions to achieve the GHG emissions limit, the CARB considers local governments partners in achieving the State's goals for reducing GHG emissions. The 2017 Scoping Plan suggests that all new land use development implement feasible measures to reduce GHG emissions, however, it does not define feasible measures nor assign a required reduction amount to new development. A fair share quantitative threshold based on the 2017 Scoping Plan is not presently feasible as the nexus between a project's contribution and its fair share mitigation is not well defined.

Based on the 29.5 percent reduction from BAU for the buildout year (2023), the proposed project would not have a significant impact on GHG emissions as it would meet the SJVAPCD's threshold of 29 percent and exceed the CARB's 21.7 percent reduction necessary from all sources to meet the AB 32 emissions limit.

For the year 2030, the project achieves a 38.7 percent reduction from BAU, which demonstrates substantial progress towards achieving the 2030 target.

Regarding the years 2045 and 2050, there have been Executive Orders issued to address carbon neutrality and GHG reduction targets, respectively for those years, however, there are no existing GHG reduction measures or plans that specifically address those Orders. Historically, the State would take the lead in developing regulatory and market measures to achieve the required reductions. The proposed project would participate in the reductions through adherence with regulations and

continued improvements to the motor vehicle efficiencies accessing the project site. Studies have shown that in order to meet the 2050 targets, aggressive pursuit of technologies in the transportation and energy sectors, including electrification and the decarbonization of fuel, will be required. Because of the technological shifts required and the unknown parameters of the regulatory framework in 2050, quantitatively analyzing the proposed project's impacts further relative to the 2050 goals is speculative for purposes of CEQA.

## Conclusion

In summary, the proposed project meets the required 29 percent below BAU guidance provided by the SJVAPCD the 21.7 percent below BAU recommended in the City of Fresno GHG Reduction Plan. Furthermore, the proposed project shows significant reductions in the year 2030, demonstrating that it would not inhibit the State's progress in achieving the 2030 GHG emissions target. The GHG emissions impact would be less than significant with respect to Consideration #1 and #2.

#### Mitigation Measures

None are required.

# b) Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

**Less Than Significant Impact**. The following analysis assesses the proposed Project's compliance with Consideration No. 3 regarding consistency with adopted plans to reduce GHG emissions. The City of Fresno adopted its GHG Reduction Plan as part of the General Plan Update in 2014. The proposed Project's consistency with applicable GHG policies from the GHG Reduction Plan policies is assessed below. The proposed project is also assessed for its consistency with CARB's adopted Scoping Plans.

#### Consistency with City of Fresno's Adopted Greenhouse Gas Reduction Plan

The Fresno General Plan includes a GHG Plan that provides the City's primary strategy

for reducing GHG emissions.<sup>11</sup> The intent of the GHG Plan is to achieve compliance with state GHG reduction mandates by focusing on feasible actions the City can take to minimize the adverse impacts of growth and development on climate change. The GHG Plan does not reinvent the wheel; rather, it builds on the General Plan policies and implementation measures. Where needed, the GHG Plan provides more details to clarify and focus action and to ensure implementation.

As evaluated in Impact GHG-1, the proposed Project would not conflict with the GHG reduction goals identified in the City of Fresno's adopted GHG Reduction Plan based on the project's achievement of reductions from BAU. Furthermore, compliance with Title 24 standards would ensure that the proposed project would not conflict with any of the General Plan energy conservation policies related to the proposed project's building envelope, mechanical systems, and indoor and outdoor lighting. Relevant policies aimed to reduce emissions of GHGs are listed under the "Local Setting" section of this memorandum. Several of the relevant policies are voluntary or cannot be implemented by an individual development project. However, compliance with regulations enforced by the City of Fresno would ensure the project would not conflict with the City's efforts to reduce community-generated GHG emissions.

#### Consistency with CARB's Adopted Scoping Plans

The State's regulatory program implementing the 2008 Scoping Plan is now fully mature. All regulations envisioned in the Scoping Plan have been adopted, and the effectiveness of those regulations has been estimated by the agencies during the adoption process and then tracked to verify their effectiveness after implementation. The combined effect of this successful effort is that the State now projects that it will meet the 2020 target and achieve continued progress toward meeting post-2020 targets. Governor Brown, in the introduction to Executive Order B-30-15, stated "California is on track to meet or exceed the current target of reducing greenhouse gas emissions to 1990 levels by 2020, as established in the California Global Warming Solutions Act of 2006 (AB 32)."

The State's regulatory program is able to target both new and existing development because the two most important strategies, motor vehicle fuel efficiency and emissions from electricity generation, obtain reductions equally from existing sources and new

<sup>11</sup> City of Fresno. 2014. City of Fresno General Plan. December. Website: <u>https://www.fresno.gov/darm/general-plan-development-code/</u> Accessed October, 2021.

sources. This is because all vehicle operators use cleaner low carbon fuels and buy vehicles subject to the fuel efficiency regulations and all building owners or operators purchase cleaner energy from the grid that is produced by increasing percentages of renewable fuels. This includes regulations on mobile sources such as the Pavley standards that apply to all vehicles purchased in California, the LCFS (Low Carbon Fuel Standard) that applies to all fuel sold in California, and the Renewable Portfolio Standard and Renewable Energy Standard under SB 100 that apply to utilities providing electricity to all California end users.

Moreover, the Scoping Plan strategy will achieve more than average reductions from energy and mobile source sectors that are the primary sources related to development projects and lower than average reductions from other sources such as agriculture. The proposed project's operational GHG emissions would principally be generated from electricity consumption and vehicle use, which are directly under the purview of the Scoping Plan strategy and have experienced reductions above the State average reduction. Considering this information, the proposed project would be consistent with the State's AB 32 and SB 32 GHG reduction goals. As such, the proposed project's GHG impacts would be less than significant.

## Consistency Regarding GHG Reduction Goals for 2050 under Executive Order S-3-05

Regarding goals for 2050 under Executive Order S-3-05, at this time it is not possible to quantify the emissions savings from future regulatory measures, as they have not yet been developed; nevertheless, it can be anticipated that operation of the proposed project would comply with whatever measures are enacted that State lawmakers decide would lead to an 80 percent reduction below 1990 levels by 2050. In its 2008 Scoping Plan, CARB acknowledged that the "measures needed to meet the 2050 target are too far in the future to define in detail." In the First Scoping Plan Update; however, CARB generally described the type of activities required to achieve the 2050 target: "energy demand reduction through efficiency and activity changes; large scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and rapid market penetration of efficiency and clean energy technologies that requires significant efforts to deploy and scale markets for the cleanest technologies immediately." The 2017 Scoping Plan provides an intermediate target that is intended to achieve reasonable progress toward the 2050 target.

Accordingly, taking into account the proposed project's design features and the progress being made by the State towards reducing emissions in key sectors such as transportation, industry, and electricity, the proposed project would be consistent with State GHG Plans and would further the State's goals of reducing GHG emissions 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050, and does not obstruct their attainment.

#### Mitigation Measures

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	
IX. HAZARDS AND HAZARDOUS MATERIAL – Would the project:					
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			Х		
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			Х		
ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	
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c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			Х		
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			Х		
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?			Х		
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			Х		

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				х

# a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

**Less Than Significant Impact.** Construction of the Project would require the use and transport of hazardous materials, including fuels, oils, and other chemicals (e.g., paints, lead, adhesives, etc.) typically used during construction. It is likely that these hazardous materials and vehicles would be stored by the contractor(s) on-site during construction activities. Improper use and transportation of hazardous materials could result in accidental releases or spills, potentially posing health risks to workers, the public, and the environment. However, all materials used during construction would be contained, stored, and handled in compliance with applicable standards and regulations established by the Department of Toxic Substances Control (DTSC), the U.S. Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration (OSHA). In addition, as discussed previously, a Storm Water Pollution Prevention Plan (SWPPP) is required for the Project and shall include emergency procedures for incidental hazardous materials releases. The SWPPP also includes Best Management Practices which includes requirements for hazardous materials storage.

The use of hazardous materials would mostly be confined to the Project construction period. Any impacts are *less than significant.* 

# b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

**Less Than Significant.** The proposed Project includes the development of a new 162,650 square foot concrete tilt-up shell building warehouse and parking lot, including pole lighting. As discussed in Impact a) above, the use of hazardous materials would be primarily confined to the Project construction period and those materials would be contained, stored, and handled in compliance with applicable standards and regulations. As such, there are *less than significant impacts* regarding the release of hazardous materials into the environment.

# c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

**Less Than Significant Impact.** Fresno Adventist Academy is located approximately 0.25 miles south (.) of the Project site located on the north side of East Olive Avenue in between North Peach and North Clovis Avenues. Turner Elementary School is also located approximately one mile south of the Project site located on the south side of East Clay Avenue In between North Peach Avenue and North Bush Avenue. Any hazardous materials contained, stored, or handled on site would be in compliance with applicable standards and regulations established by the Department of Toxic Substances Control (DTSC), the U.S. Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration (OSHA). The immediate area surrounding the Project site is primarily comprised of airport and industrial purposes. Any impacts would be *less than significant*.

# d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

**Less Than Significant Impact.** The proposed project site is not located on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5

(Geotracker<sup>12</sup> and Envirostor<sup>13</sup> databases – accessed in December 2021). There are no hazardous materials sites in the vicinity that impact the project. As such, any impacts would remain *less than significant*.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

**Less than Significant Impact.** The Project site is located within the Airport Influence Area (AIA) of Fresno-Yosemite International Airport, which lies approximately 0.1 mile to the north. The Project site is located within the Traffic Pattern Zone (TPZ) 6 per the Airport Land Use Compatibility Plan (ALUCP).<sup>14</sup> Aircraft accident risk level is considered to be low within the TPZ. The project will be required to follow Safety Criteria Matrix (Table 3A, ALUCP) for construction within the TPZ which includes but is not limited to:

- Airport disclosure notice required
- Airspace review required for objects >100 feet tall
- New structures are prohibited on existing terrain that penetrates 14 CFR Part 77 surfaces
- New structures require additional airspace analysis required within the 50-foot terrain penetration buffer.

As the Project will be in compliance with the required Safety Criteria Matrix of the Fresno-Yosemite International Airport, any impacts are considered *less than significant*.

<sup>12</sup> California State Water Resources Control Board, GeoTracker

Databasehttps://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=5255+e+home+ave%2C+fresno Accessed December 2021.

<sup>13</sup> Department of Toxic Substances Control, EnviroStor Database. <u>https://www.envirostor.dtsc.ca.gov/public/map/</u>. Accessed December 2021.

<sup>14</sup> Fresno County Airport Land Use Compatibility Plan, December 2018. Website: <u>https://2ave3l244ex63mgdyc1u2mfp-</u> wpengine.netdna-ssl.com/wp-content/uploads/2019/01/fresno-draft-ALUCP-12-04-17c.pdf

# f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

**Less Than Significant.** The City's Police and Fire Departments are the lead agencies for all local emergency response efforts. The City of Fresno has consulted with its police, fire and ambulance service providers to determine that the proposed project provides adequate emergency access to the Project site and surrounding areas. Objective NS-6 and Policies NS-6-a through NS-6-g of the approved General Plan would reduce potential impacts to emergency response and evacuation.

- **Objective NS-6**: Foster an efficient and coordinated response to emergencies and natural disasters.
  - Policy NS-6-a: County Multi-Jurisdiction Hazard Mitigation Plan.
    Adopt and implement the Fresno County Multi-Jurisdiction Hazard
    Mitigation Plan and City of Fresno Local Hazard Mitigation Plan Annex.
  - Policy NS-6-b: Disaster Response Coordination. Maintain coordination with other local, State, and Federal agencies to provide coordinated disaster response.
  - Policy NS-6-c: Emergency Operations Plan. Update the City's Emergency Operations Plan periodically, using a whole community approach which integrates considerations for People with access and functional needs in all aspects of planning.
  - Policy NS-6-d: Evacuation Planning. Maintain an emergency evacuation plan in consultation with the Police and Fire Departments and other emergency service providers, which shows potential evacuation routes and a list of emergency shelters to be used in case of catastrophic emergencies.
  - Policy NS-6-e: Critical Use Facilities. Ensure critical use facilities (e.g. City Hall, police and fire stations, schools, hospitals, public assembly facilities, transportation services) and other structures that are important to protecting health and safety in the community remain operational during an emergency.
    - Site and design these facilities to minimize their exposure and susceptibility to flooding, seismic and geological effects, fire and explosions.

- Work with the owners and operators of critical use facilities to ensure they can provide alternate sources of electricity, water, and sewerage in the event that regular utilities are interrupted in a disaster.
- Policy NS-6-f: Emergency Vehicle Access. Require adequate access for emergency vehicles in all new development, including adequate widths, turning radii, hard standing areas, and vertical clearance.
- Policy NS-6-g: Emergency Preparedness Public Awareness Programs. Continue to conduct programs to inform the general public, including people with access and functional needs, of the City's emergency preparedness and disaster response procedures.

Additionally, the City will also provide specific construction schedules and pertinent Project information so that adequate access is maintained at all times. Therefore, the project will have *a less than significant impact.* 

# g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

**No Impact.** Implementation of the project would not change the degree of exposure to wildfires because there are no wildlands in the Project vicinity, thus precluding the possibility of wildfires. Therefore, there is *no impact.* 

### Mitigation Measures

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	
X. HYDROLOGY AND WATER Q	X. HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			Х		
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?		Х			
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:			Х		
i) Result in a substantial erosion or siltation on- or off-site;			х		

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site:			Х	
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			Х	
iv) impede or redirect flood flows?			Х	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			Х	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			Х	

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

**Less Than Significant Impact**. The Project has the potential to impact water quality standards and/or waste discharge requirements during construction (temporary impacts) and operation. Impacts are discussed below.

### Construction

Although the proposed Project site is relatively small in scale, grading, excavation and loading activities associated with construction activities could temporarily increase runoff, erosion, and sedimentation. Construction activities also could result in soil compaction and wind erosion effects that could adversely affect soils and reduce the revegetation potential at construction sites and staging areas.

Three general sources of potential short-term construction-related stormwater pollution associated with the proposed Project are: 1) the handling, storage, and disposal of construction materials containing pollutants; 2) the maintenance and operation of construction equipment; and 3) earth moving activities which, when not controlled, may generate soil erosion and transportation, via storm runoff or mechanical equipment. Generally, routine safety precautions for handling and storing construction materials may effectively mitigate the potential pollution of stormwater by these materials. These same types of common sense, "good housekeeping" procedures can be extended to non-hazardous stormwater pollutants such as sawdust and other solid wastes.

Poorly maintained vehicles and heavy equipment leaking fuel, oil, antifreeze, or other fluids on the construction site are also common sources of stormwater pollution and soil contamination. In addition, grading activities can greatly increase erosion processes. Two general strategies are recommended to prevent construction silt from entering local storm drains. First, erosion control procedures should be implemented for those areas that must be exposed. Secondly, the area should be secured to control offsite migration of pollutants. These Best Management Practices (BMPs) would be required in the Stormwater Pollution Prevention Plan (SWPPP) to be prepared prior to commencement of Project construction. When properly designed and implemented, these "good-housekeeping" practices are expected to reduce short-term construction-related impacts to less than significant.

In accordance with the National Pollution Discharge Elimination System (NPDES) Stormwater Program, the Project will be required to comply with existing regulatory

requirements to prepare a SWPPP designed to control erosion and the loss of topsoil to the extent practicable using BMPs that the Regional Water Quality Control Board (RWQCB) has deemed effective in controlling erosion, sedimentation, runoff during construction activities. The specific controls are subject to the review and approval by the RWQCB and are an existing regulatory requirement.

### Operation

The long-term operations of the proposed Project could result in long-term impacts to surface water quality from urban stormwater runoff. The proposed Project would result in new impervious areas associated with site improvements, including new asphalt, concrete and the proposed structures on site. Urban runoff typically contains oils, grease, fuel, antifreeze, byproducts of combustion (such as lead, cadmium, nickel, and other metals) and other household pollutants. Precipitation early in the rain season displaces these pollutants into storm water resulting in high pollutant concentrations in initial wet weather runoff. This initial runoff with peak pollutant levels can be referred to as the "first flush" of storm events.

The proposed Project would install storm water drainage facilities (e.g. storm drainage mechanisms and storm water pipes) that would be in compliance with the City of Fresno and FMFCD Design Standards.

In accordance with the City's storm water management regulations and NPDES Stormwater Program (General Stormwater Permit), BMPs would be implemented to reduce the amount of pollution in stormwater discharged from the Project site. The management of water quality through the requirement to obtain a General Stormwater Permit and implement appropriate BMPs would ensure that water quality does not degrade to levels that would violate water quality standards. These are existing regulatory requirements.

In addition, the Project will generate typical wastewater (sewer) associated with the restroom facilities and will connect to the City's sewer system. The Project will not result in a violation of any water quality standards or waste discharge requirements.

Therefore, any impacts are less than significant.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less Than Significant Impact with Mitigation. The proposed Project includes the installation of a 162,650 square foot warehouse which will be equipped with restroom facilities. Water service would be provided to the Project by the City of Fresno. Based on the assumptions in the City's UWMP, the Project would not negatively impact water supplies or otherwise deplete groundwater supplies. Moreover, the proposed Project is not anticipated to interfere with groundwater recharge efforts being implemented by the City. The City's UWMP contains a detailed evaluation of existing sources of water supply, anticipated future water demand, extensive conservation measures, and the development of new water supplies (recycled water, increased recharge, surface water treatment, etc.). Measures contained in the UWMP as well as the City's General Plan are intended to reduce demands on groundwater resources by augmenting supply and introducing conservation measures and other mitigation strategies. Implementation of PEIR Mitigation Measure HYD – 2.1, which states that the City shall continue to be an active participant in the North Kings Groundwater Sustainability Agency to ensure that the Kings Subbasin has balanced levels of pumping and recharge will ensure that any impacts remain less than significant.

- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:
  - i. Result in substantial erosion or siltation on- or off-site?

Less Than Significant Impact. The Project includes changes to the existing stormwater drainage pattern of the area through site construction activities, the installation of a warehouse and associated parking lot, asphalt concrete, driveways, curb, gutter and sidewalks. The Project has been reviewed by the Fresno Metropolitan Flood Control District and conditions and requirements of the Project pertaining to storm drain facilities have been provided to the Project developer. Additionally, a drainage and grading plan will be required as part of the submittal package to the City of Fresno, which will ensure stormwater will drain to the appropriate drainage inlet. As such, the Project will have a *less* 

#### than significant impact.

# ii. Substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?

**Less Than Significant Impact.** As discussed in Impact c)i. above, the proposed Project developer will be required to prepare a drainage/grading plan as part of the permit process. Potential impacts resulting from surface runoff will be *less than significant.* 

# iii. Create or contribute runoff water, which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less Than Significant Impact. Site runoff from precipitation currently either percolates into the ground where there are no impervious surfaces or drains into the City's stormwater system and eventually into drainage basins that serve the area. Site development will result in the addition of impervious surfaces in the form of foundations, buildings, a parking lot, and other paved surfaces. This will result in an increase in storm water runoff from the site and will increase the potential for contaminated runoff to enter FMFCD drainage basins or for drainage basins to overflow and cause flooding. However, the proposed Project will be designed to FMFCD and City of Fresno standards to prevent drainage overflow and flooding and the potential for contaminated runoff. The Project site has been anticipated for industrial urban use by the City of Fresno General Plan. As with all developments, existing policies and standards are required to be complied with, which are assessed during design and review of entitlements by the City and FMFCD to ensure that none of the water quality standards are violated and that waste discharge requirements are adhered to during construction and operation of the Project.

The proposed Project will connect to the City of Fresno's existing storm-drain system and pay drainage fees pursuant to the Drainage Fee Ordinance. Impacts resulting from polluted runoff will be *less than significant*.

#### iv. Impede or redirect flood flows?

**Less Than Significant Impact.** The Project site is outside of any Specia Flood Hazard Area and as such, flood flows are not anticipated. As discussed above, the proposed Project will be designed to FMFCD and City of Fresno standards to prevent drainage overflow and flooding.Impacts resulting from impeding or redirecting flood flows will be *less than significant*.

# d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

**Less Than Significant Impact.** The Project is outside of any Special Flood Hazard Areas, as identified by the Federal Emergency Management Agency, Flood Map 06019C1590H, effective 2/18/2009. There are no bodies of water near the site that would create a potential risk of hazards from seiche, tsunami or mudflow. The Project will not conflict with any water quality control plans or sustainable groundwater management plan. As mentioned in Impact c) above, all new development within the City of Fresno Planning Area must conform to standards and plans detailed by the Fresno Metropolitan Flood Control District. By conforming to all standards and policies as outlined, any impacts will remain *less than significant*.

# e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

**Less Than Significant Impact.** The City of Fresno is part of the North Kings Groundwater Sustainability Agency (GSA) which is one of the seven GSA's within the Kings Groundwater Subbasin. The North Kings GSA submitted the Groundwater Sustainability Plan to the CA Department of Water Resources in January 2020. As the City of Fresno will provide water to the proposed Project (upon approval), and the City will be subject to the requirements of the GSA, the proposed Project does not conflict with any adopted water quality or sustainable groundwater management plan.Any impacts are *less than significant*.

# Mitigation Measures

1. The proposed project shall implement and incorporate, as applicable, the hydrology related mitigation measures as identified in the attached Project Specific Mitigation Monitoring Checklist dated September 23, 2022.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. LAND USE AND PLANNING -	Would the pr	oject:		
a) Physically divide an established community?			Х	
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			Х	

# DISCUSSION

### a) Physically divide an established community?

**Less Than Significant Impact**. The immediate vicinity of the proposed project site is comprised of airport, industrial businesses, and roadways. The proposed Project includes the development of a new warehouse and parking lot and the associated

improvements and will not divide an existing community. Any impacts are *less than significant.* 

# b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

**Less Than Significant Impact.** Based upon compliance with the goals, objectives and policies referenced herein below, the proposed Project is determined to be consistent with the Fresno General Plan goals and objectives related to land use and the urban form:

<u>Goal No. 1 of the Fresno General Plan</u>: Increase opportunity, economic development, business and job creation.

The Project will provide temporary construction jobs and will ultimately provide longterm jobs for the growing local work force for employees of the warehouse. The number of employees is currently unknown; however, 158 parking stalls will be provided.

<u>Goal No. 7 of the Fresno General Plan</u>: Provide for a diversity of districts, neighborhoods, housing types (including affordable housing), residential densities, job opportunities, recreation, open space, and educational venues that appeal to a broad range of people throughout the City.

This Goal contributes to the establishment of a comprehensive city-wide land use planning strategy to meet economic development objectives, achieve efficient and equitable use of resources and infrastructure, and create an attractive living environment in accordance with Objective LU-1 of the Fresno General Plan.

<u>Goal No. 12 of the Fresno General Plan</u>: Resolve existing public infrastructure and service deficiencies, make full use of existing infrastructure, and invest in improvements to increase competitiveness and promote economic growth.

The Project will tie into existing infrastructure as necessary (water, sewer and storm water) located in the Project vicinity.

Implementing Policies LU-1-a and LU-2-a of the Fresno General Plan: promote development of vacant, underdeveloped, and re-developable land within the Existing City Limits as of December 31, 2012 where urban services are available.

The proposed Project will be constructed in an area planned for light industrial development where urban services are available.

The Project will not conflict with any conservation plans since it is not located within any conservation plan areas.

*Fresno County Airport Land Use Compatibility Plan:* On December 3, 2018, the Airport Land Use Commission (ALUC) adopted the Fresno County Airport Land Use Compatibility Plan. The proposed Project is within the Airport Influence Area of the nearest airport, Fresno-Yosemite International Airport and will conform to all standards outlined in the Plan.

Therefore, it is determined that the proposed Project is consistent with respective general plan objectives and policies and will not significantly conflict with applicable land use plans, policies or regulations of the City of Fresno. Furthermore, the proposed Project, including the design and improvement of the subject property, is found; (1) To be consistent with the goals, objectives and policies of the applicable Fresno General Plan; (2) To be suitable for the type and density of development; (3) To be safe from potential cause or introduction of serious public health problems; and, (4) To not conflict with any public interests in the subject property or adjacent lands.

There are no aspects of this Project that will result in impacts to land use and planning beyond those analyzed in the PEIR SCH No. 2012111015 for the Fresno General Plan.

The Project would have a less than significant impact.

#### Mitigation Measures

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. MINERAL RESOURCES – Wo	ould the project	ot:		
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				х
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				х

# a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

**No Impact.** Mineral resources are concentrated along the San Joaquin River Corridor. The proposed Project is not located along the San Joaquin River Corridor, there are no known mineral resources in the proposed Project area, and none are identified in the City's General Plan near the Project site. Therefore, there is *no impact.* 

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

**No Impact.** As discussed in Impact a) above, there are no known mineral resources identified in the City's General Plan in the proposed Project area. There is *no impact.* 

# Mitigation Measures

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE – Would the project re	sult in:			
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			Х	
b) Generation of excessive groundborne vibration or groundborne noise levels?			Х	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			Х	

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?

Less Than Significant Impact.

# Short-term (Construction) Noise Impacts

Proposed Project construction related activities will involve temporary noise sources. Typical construction related equipment includes graders, trenchers, small tractors, and excavators. During the proposed Project construction, noise from construction related activities will contribute to the noise environment in the immediate vicinity. Activities involved in construction will generate maximum noise levels, as indicated in Table 12, ranging from 79 to 91 dBA at a distance of 50 feet, without feasible noise control (e.g., mufflers) and ranging from 75 to 80 dBA at a distance of 50 feet, with feasible noise controls.

Type of Equipment	dBA at 50 ft		
	Without Feasible Noise Control	With Feasible Noise Control	
Dozer or Tractor	80	75	
Excavator	88	80	
Scraper	88	80	
Front End Loader	79	75	
Backhoe	85	75	
Grader	85	75	
Truck	91	75	

### Table 12: Typical Construction Noise Levels

The distinction between short-term construction noise impacts and long-term operational noise impacts is a typical one in both CEQA documents and local noise ordinances, which generally recognize the reality that short-term noise from construction is inevitable and cannot be mitigated beyond a certain level. Thus, local agencies frequently tolerate short-term noise at levels that they would not accept for permanent noise sources. A more severe approach would be impractical and might preclude the kind of construction activities that are to be expected from time to time in urban environments. Most residents of urban areas recognize this reality and expect to hear construction activities on occasion.

Construction activities would not occur between the hours of 10:00 PM and 7:00 AM, Monday through Saturday, and not at all on Sundays, in accordance with Fresno Municipal Code Section 10-109, which limits work hours "to between the hours of 7 AM and 10 PM on any day except Sunday."

### Long-term (Operational) Noise Impacts

### Project Traffic Noise Impacts on Existing Noise-Sensitive Land Uses

The primary source of on-going noise from the Project will be from vehicles traveling to and from the site and from traffic traveling along East Home Avenue and North Peach Avenue. The Project site will also be subject to industrial-related noise due to proximity with nearby industrial businesses. The Project will generate noise associated with the loading docks and will generate an increase in traffic on some roadways in the Project area. The CalEEMod output files (provided in Appendix A) show the project generating an average of 202 daily vehicle trips. The relatively low number of new trips associated with the Project is not likely to increase the ambient noise levels by a significant amount. Policy H-1-b of the City's Noise Element addresses significant Project-related increases in ambient noise levels for evaluation of noise impacts. A significant increase is assumed to occur if a project causes the ambient noise level to increase by the following amounts:

Where ambient noise levels are <60 dB: an increase of 5 dB or more

Where ambient noise levels are 60-65 dB: an increase of 3 dB or more

Where ambient noise levels are >65 dB: an increase of 1.5 dB or more

Given the amount of existing vehicular activity in the Project area, the nearby airport, and the low daily vehicle trips, ambient noise levels are not expected to increase by more than 1 dB. The area is active with vehicles, industrial businesses and agriculture and the proposed Project will not introduce a new significant source of noise that isn't already occurring in the area. Therefore, the impact is considered *less than significant*.

# b) Generation of excessive groundborne vibration or groundborne noise levels?

**Less Than Significant Impact.** The dominant sources of man-made vibration are sonic booms, blasting, pile driving, pavement breaking, demolition, diesel locomotives, and rail-car coupling. None of these activities are anticipated to occur with construction or operation of the proposed Project. Vibration from construction activities could be detected at the closest sensitive land uses, especially during movements by heavy equipment or loaded trucks and during some paving activities (if they were to occur). Typical vibration levels at distances of 100 feet and 300 feet are summarized by Table 13. These levels would not be expected to exceed any significant threshold levels for annoyance or damage, as provided above in Table 13.

	PPV (	in/sec)
Equipment	@100'	@300'
Bulldozer (Large)	0.011	0.006
Bulldozer (Small)	0.0004	0.00019
Loaded Truck	0.01	0.005
Jackhammer	0.005	0.002
Vibratory Roller	0.03	0.013
Caisson Drilling	0.01	0.006
Source: Caltrans		

# Table 13: Typical Vibration Levels During Construction

After full project build out, it is not expected that ongoing operational activities will result in any vibration impacts at nearby sensitive uses. There are no aspects of construction or daily operations that would create groundborne vibration. As such, any impacts would be *less than significant*.

c) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

**Less Than Significant Impact.** The analysis in this Noise Resource section is based off the Airport Land Use Compatibility Noise Guidelines Study prepared by WJV Acoustics, Inc. The Study is provided in its entirety in Appendix C.

The Project site is located within the AIA of Fresno-Yosemite International Airport. Fresno County ALUCP provides compatibility guidelines for specific land use designations located within specific airport noise exposure contours (Table 3B of Fresno County ALUCP). The proposed Project would be operated as a warehouse facility and associated parking lot. The Project site is located within the airport 60-65 dB CNEL noise exposure contour. Figure 2 of Appendix C provides the Project site location in respect to the airport future noise contours.

Reference to the project site location as well as the ALUCP Noise Guidelines compatibility matrix (Table 3B of Fresno County ALUCP), it can be determined that the proposed project land use designations (warehouse, parking) are considered to be compatible without any restrictions. The compatibility determination applies to all noise contours at the airport. Therefore, it has been determined that the proposed project is wholly compatible with guidelines and land use criteria established in the Fresno Yosemite International Airport Land Use Compatibility Plan. Mitigation measures are not required for project compliance.

As such, impacts will remain less than significant.

#### Mitigation Measures

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. POPULATION AND HOUSIN	G – Would the	e project:		
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			Х	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				х

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

**Less Than Significant Impact.** There are no new homes associated with the proposed Project and there are no residential structures currently on-site. The area surrounding the site is almost fully developed with industrial uses and the site itself is designated and zoned by the General Plan for industrial uses. The proposed Project includes construction of a new warehouse building, parking lot, associated site improvements, will and will utilize the existing road and infrastructure network. The Project would temporarily provide construction jobs in the City of Fresno area, which could be readily filled by the existing employment base. At full build-out, the warehouse will provide some long-term employment opportunities. The proposed Project will not affect any regional population, housing or employment projections anticipated by City policy documents. There is a *less than significant* impact.

# b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

**No Impact.** There are currently no residential units on-site, thus no people or existing housing will be displaced. There is *no impact*.

# Mitigation Measures

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. PUBLIC SERVICES – Would t	the project:			
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?			Х	
Police protection?			Х	
Schools?			Х	
Parks?			Х	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Other public facilities?			Х	

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

### a) Fire protection?

**Less Than Significant.** The Project includes construction of a new warehouse and parking lot, including perimeter fencing, asphalt concrete pavement, curb, gutter, and pole lighting.

The City of Fresno Fire Department (Fire Department) offers a full range of services including fire prevention, suppression, emergency medical care, hazardous materials, urban search and rescue response, as well as emergency preparedness planning and public education coordination within the Fresno City limit, in addition to having mutual aid agreements with the Fresno County Fire Protection District, and the City of Clovis Fire Departments.

The City of Fresno Fire Department operates its facilities under the guidance set by the National Fire Protection Association in NFPA 1710, the Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operation to the Public by Career Fire Departments. NFPA 1710 sets standards for turnout time, travel time, and total response time for fire and emergency medical incidents, as well as other standards for operation and fire service. The Fire Department has established the objectives set forth in NFPA 1710 as department objectives to ensure the public health, safety, and welfare.

The proposed Project would be served by the current Fire Station 7, which is located at 2571 South Cherry Avenue, approximately 7.9 miles southwest of the Project site. After reviewing the Project, the Fire Department has determined that the Project can be adequately serviced by the current local Fire Facilities and Personnel, consistent with National Fire Protection Association 1710 Objectives. Additionally, the project will also be subject to Fire Facilities Fees.

The Fresno General Plan contains the following objectives and policies:

**<u>Objective PU-3</u>**: Enhance the level of fire protection to meet the increasing demand for services from an increasing population.

Implementing Policies:

- PU-3-a Fire Prevention Inspections. Develop strategies to Fire Prevention Inspections. Enable the performance of annual fire and life safety inspection of all industrial, commercial, institutional, and multi-family residential buildings, in accordance with nationally recognized standards for the level of service necessary for a large Metropolitan Area, including a self-certification program.
- **PU-3-b** Reduction Strategies. Develop community risk Reduction Strategies, such as strategies that target high service demand areas, vulnerable populations (e.g. young children, older adults, non-English speaking residents, persons with disabilities, etc.), and high life hazard occupancies.
- **PU-3-c** Public Education Strategies. Develop strategies to Public Education Strategies. Re-establish and enhance routine public education outreach to all sectors of the community.
- **PU-3-d** Review Development Application Review Development Application Applications. Continue Fire Department review of development applications,

provide comments and recommend conditions of approval that will ensure adequate on-site and off-site fire protection systems and features are provided.

- PU-3-e Building Codes. Adopt and enforce amendments to construction and fire codes, as determined appropriate, to systematically reduce the level of risk to life and property from fire, commensurate with the City's fire suppression capabilities.
- **PU-3-f** Adequate Infrastructure. Continue to pursue the provision of adequate water supplies, hydrants, and appropriate property access to allow for adequate fire suppression throughout the City.
- **PU-3-g** Cost Recovery. Continue to evaluate appropriate codes, policies, and methods to generate fees or other sources of revenue to offset the ongoing personnel and maintenance costs of providing fire prevention and response services.
- PU-3-I New Fire Station Locations. Consideration will be given to co-locating new Fire Station facilities with other public property including, but not limited to, police substations, schools, parks, playgrounds, and community centers to create a synergy of participation in the neighborhood with the potential result of less vandalism and promotion of a better sense of security for the citizens using these facilities.

The Project would be required to comply with all applicable fire and building safety codes (California Building Code and Uniform Fire Code) to ensure fire safety elements are incorporated into final Project design. As a result, appropriate fire safety considerations will be included as part of the final design of the Project. Project implementation will result in *less than significant impacts*.

#### b) Police protection?

**Less Than Significant.** The Project includes construction of a new warehouse and parking lot, including perimeter fencing, asphalt concrete pavement, curb, gutter, and pole lighting in an area almost fully developed with industrial uses. The surrounding area is currently protected by the existing Southeast Police District, approximately 2.6 miles to the south at 224 S Argyle Avenue. The Fresno Police Department provides a full range of police services including uniformed patrol response to calls for service, crime prevention, tactical crime and enforcement (including gang and violent crime suppression), and traffic enforcement/accident prevention. The proposed Project would also be protected by the Southeast Police District and would be subject to pay development impact fees to offset any potential impacts to police protection. Any impacts are considered *less than significant*.

#### c) Schools?

**Less Than Significant.** The Project includes construction of a new warehouse and parking lot, including perimeter fencing, asphalt concrete pavement, curb, gutter, and pole lighting. The proposed Project does not contain any residential uses. The proposed Project, therefore, would not result in an influx of new students in the Project area and is not expected to result in an increased demand upon District resources and would not require the construction of new facilities. Any impacts are considered *less than significant.* 

#### d) Parks?

**Less Than Significant.** The Project includes construction of a new warehouse and parking lot, including perimeter fencing, asphalt concrete pavement, curb, gutter, and pole lighting. The Project would not result in an increase in demand for parks and recreation facilities because it would not result in an increase in population. Impacts are considered *less than significant*.

#### e) Other public facilities?

**Less Than Significant.** The Project includes construction of a new warehouse and parking lot, including perimeter fencing, asphalt concrete pavement, curb, gutter, and pole lighting. The Project does not include any residences and, therefore, would not result in increased demand for, or impacts on, other public facilities such as library services. Development of the Project will not require construction of additional facilities. Impacts are *less than significant*.

#### Mitigation Measures

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	
XVI. RECREATION Would the project:					
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			Х		
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			Х		

# DISCUSSION

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

**Less Than Significant.** The Project includes construction of a new warehouse and parking lot, including perimeter fencing, asphalt concrete pavement, curb, gutter, and pole lighting. The Project does not include the construction of residential uses and would not directly or indirectly induce population growth. Therefore, the proposed

Project would not cause physical deterioration of existing recreational facilities from increased usage. Impacts are *less than significant.* 

b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

**Less Than Significant.** As discussed above, the Project includes construction of a new warehouse and parking lot, including perimeter fencing, asphalt concrete pavement, curb, gutter, and pole lighting. Additionally, the Project does not include development of residential uses and therefore, the proposed Project would not result in the need for new or expanded recreational facilities. Impacts are *less than significant.* 

#### Mitigation Measures

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact		
XVII. TRANSPORTATION – Would the project:						
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			Х			
b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?			Х			

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			Х	
d) Result in inadequate emergency access?			х	

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

**Less Than Significant.** The proposed Project includes construction and operation of a warehouse, parking lot, and associated site improvements on East Home Avenue, east of North Peach Avenue. Project development would be in accordance with alternative transportation policies included in the City of Fresno General Plan, the Fresno County Regional Transportation Plan, and any other adopted policies, plans or programs supporting alternative transportation. As such, any impacts are considered *less than significant.* 

# b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

**Less Than Significant Impact**. Senate Bill (SB) 743 requires that relevant CEQA analysis of transportation impacts be conducted using a metric known as vehicle miles

traveled (VMT) instead of Level of Service (LOS). VMT measures how much actual auto travel (additional miles driven) a proposed project would create on California roads. If the project adds excessive car travel onto our roads, the project may cause a significant transportation impact.

The State CEQA Guidelines were amended to implement SB 743, by adding Section 15064.3. Among its provisions, Section 15064.3 confirms that, except with respect to transportation projects, a project's effect on automobile delay shall not constitute a significant environmental impact. Therefore, LOS measures of impacts on traffic facilities is no longer a relevant CEQA criteria for transportation impacts.

CEQA Guidelines Section 15064.3(b)(4) states that "[a] lead agency has discretion to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled, and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate used to estimate vehicle miles traveled and any revision to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section."

On June 25, 2020, the City of Fresno adopted CEQA Guidelines for Vehicle Miles Traveled Thresholds, dated June 25, 2020, pursuant to Senate Bill 743 to be effective of July 1, 2020. The thresholds described therein are referred to herein as the City of Fresno VMT Thresholds. The City of Fresno VMT Thresholds document was prepared and adopted consistent with the requirements of CEQA Guidelines Sections 15064.3 and 15064.7. The December 2018 Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory) published by the Governor's Office of Planning and Research (OPR), was utilized as a reference and guidance document in the preparation of the Fresno VMT Thresholds.

The City of Fresno VMT Thresholds adopted a screening standard and criteria that can be used to screen out qualified projects that meet the adopted criteria from needing to prepare a detailed VMT analysis.

The City of Fresno VMT Thresholds Section 3.0 regarding Project Screening discusses a variety of projects that may be screened out of a VMT analysis including specific 69

development and transportation projects. For development projects, conditions may exist that would presume that a development project has a less than significant impact. These may be size, location, proximity to transit, or trip-making potential. For transportation projects, the primary attribute to consider with transportation projects is the potential to increase vehicle travel, sometimes referred to as "induced travel."

The VMT analysis was prepared by VRPA Technologies, Inc., and is included as Appendix D of this document. The analysis was conducted using the City of Fresno's CEQA Guidelines for Vehicle Miles Travelled Thresholds (City of Fresno 2020). Pages 9 through 19 of the guidelines describe various conditions under which a project's VMT impacts may be presumed to be insignificant. The following two conditions are relevant to the proposed project:

- Residential and office projects that are located in areas with low VMT, and that incorporate similar features (i.e., density, mix of uses, transit accessibility), will tend to exhibit similarly low VMT.
- Based on the City's traffic study guidelines or existing CEQA guidelines, other conditions may apply to screen out projects.

Although the proposed Project is not an office project, its characteristics with respect to VMT are almost identical to those of an office project. According to CEQA guidance provided by the Governor's Office of Planning and Research (OPR), heavy duty truck trips are not included in the definition of VMT associated with a project. The Technical Advisory on Evaluating Transportation Impacts in CEQA (OPR 2018) includes the following statement: "Section 15064.3, subdivision (a), states, 'For the purposes of this section, 'vehicle miles traveled' refers to the amount and distance of automobile travel attributable to a project.' Here, the term "automobile" refers to on-road passenger vehicles, specifically cars and light trucks." Due to the exclusion of heavyduty truck trips, the VMT characteristics of an office and a warehouse are nearly identical in that the primary component of VMT would be employee commute trips and secondary components of VMT would be employee non-commute trips and visitor trips.

Based on the conclusion that the project can be treated as an office project for the purposes of VMT analysis, the first bullet above is applicable and analysis was conducted to determine whether the project is located in a low VMT area. Figure 7 of

the City of Fresno's CEQA Guidelines for Vehicle Miles Travelled Thresholds includes a map showing where low VMT areas are located in the City of Fresno based on VMT per employee characteristics. The project's location on the north side of Home Avenue east of Peach Avenue is in a low VMT area. A copy of Figure 7 is included in Appendix D.

Due to the project's location in a low VMT area of the City of Fresno, it meets the conditions for being screened out of requiring further VMT analysis and it can be presumed to have a *less than significant* VMT impact.

# c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

**Less Than Significant Impact.** The proposed Project has been designed for ease of access, adequate circulation/movement, and is typical of light industrial developments in the City of Fresno. On-site circulation patterns do not involve high speeds, sharp curves or dangerous intersections. Although there will be slight increase in the volume of vehicles accessing the site and surrounding areas, the proposed Project will not present a substantial increase in hazards. Any impacts are considered *less than significant*.

### d) Result in inadequate emergency access?

**Less Than Significant Impact.** The proposed Project does not involve a change to any emergency response plan. Access points to the Project site will remain accessible to emergency vehicles of all sizes. As such, potential impacts are *less than significant*.

Mitigation Measures:

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESO	URCES – Wo	uld the project:		
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC section 5020.1(k), or,			Х	
ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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II) A resource determined by the lead agency, in its discretion and supported by substantial evi- dence, to be significant pursuant to criteria set forth in subdivisionI) of PRC section 5024.1. In			X	
applying the criteria set forth in subdivisl (c) of PRC section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				

#### DISCUSSION

- a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
  - i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

**Less Than Significant Impact.** A Tribal Cultural Resource (TCR) is defined under Public Resources Code section 21074 as a site, feature, place, cultural

landscape that is geographically defined in terms of size and scope, sacred place, and object with cultural value to a California Native American tribe that are either included and that is listed or eligible for inclusion in the California Register of Historic Resources or in a local register of historical resources, or if the City of Fresno, acting as the Lead Agency, supported by substantial evidence, chooses at its discretion to treat the resource as a TCR. As discussed above, under Section V, Cultural Resources, criteria (b) and (d), no known archeological resources, ethnographic sites or Native American remains are located on the proposed Project site. As discussed under criterion (b) implementation of Mitigation Measure CUL-1 would reduce impacts to unknown archaeological deposits, including TCRs, to a less than significant level. As discussed under criterion (d), compliance with California Health and Safety Code Section 7050.5 would reduce the likelihood of disturbing or discovering human remains, including those of Native Americans. Any impacts will remain *less than significant*.

ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdilion (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in sulvision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

**Less Than Significant Impact.** In accordance with Assembly Bill (AB) 52, potentially affected Tribes were formally notified of this Project and were given the opportunity to request consultation on the Project. The City contacted the Native American Heritage Commission, requesting a contact list of applicable Native American Tribes, which was provided to the City. The City provided letters to the listed Tribes on April 16, 2022, notifying them of the Project and requesting consultation, if desired. The City received a response from one tribe, however, they declined to participate at this time and requested to be notified in the unlikely event that cultural resources are identified. Therefore, there is a *less than significant impact*.

#### Mitigation Measures

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SY	<b>(STEMS</b> – Wo	ould the project:		
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 effect?			Х	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			Х	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			Х	
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?			Х	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			Х	

#### DISCUSSION

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? **Less Than Significant Impact.** Wastewater service, electric power, natural gas and telecommunications facilities would all provide service to the proposed Project from their respective existing facilities. As discussed previously, the proposed Project is surrounded by similar industrial uses and has been designated and zoned appropriately. As such, the Project has been planned for in City infrastructure planning documents. Additionally, the applicant will be required to pay development impact fees, which the City will use to support the existing facilities. The Project will have a *less than significant impact* to this analysis area.

## b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

**Less Than Significant Impact.** Water service would be provided to the Project by the City of Fresno. The site is currently zoned Light Industrial, and as such, the site's water demand has been anticipated by the City's adopted planning documents.

While the Project would increase demand for water resources beyond current levels, the proposed usage has been planned for in the 2020 UWMP and the site is zoned and designated appropriately. Based on the assumptions in the City's UWMP, the Project would not negatively impact water supplies or otherwise deplete groundwater supplies. Moreover, the proposed Project is not anticipated to interfere with groundwater recharge efforts being implemented by the City. The City's UWMP contains a detailed evaluation of existing sources of water supply, anticipated future water demand, extensive conservation measures, and the development of new water supplies (recycled water, increased recharge, surface water treatment, etc.). Measures contained in the UWMP as well as the City's General Plan are intended to reduce demands on groundwater resources by augmenting supply and introducing conservation measures and other mitigation strategies.

In addition to adequate water supply, the Project is also subject to minimum water pressure requirements. The Fire Protection Water Demand shall be added to the overall Project water demands at 1,500 gallons per minute. The sum of the Peak Hour Water Demands and Fire Protection Demands (in gpm) shall establish the total instantaneous water supply flow required for the Project, inclusive of fire protection. The Project Applicant will be required to adhere to these standards and maintain them in perpetuity.

The proposed Project would not require new or expanded water entitlements and there is sufficient water supply for the Project. Therefore, the impact is *less than significant*.

#### c. Result in a determination by the wastewater 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?

Less Than Significant Impact. The Project will result in wastewater from warehouse building sink and restroom facilities that will be discharged into the City's existing wastewater treatment system. The wastewater will be typical of other urban development consisting of a bathrooms and other similar features. The City of Fresno Public Works Department has reviewed the Project and determined that it can accommodate the wastewater generated from the Project. Therefore, the impact of the Project on wastewater treatment is *less than significant*.

## 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?

**Less Than Significant Impact.** The Project will be served by the City's contracted waste hauler. The Project would be required to comply with the Fresno Municipal Code which outlines requirements and specifications for solid waste collection, including construction recycling. Regarding City of Fresno capacity for solid waste, the City of Fresno currently produces approximately 4,600 tons of material each week. The City of Fresno's solid waste is primarily landfilled at the American Avenue Landfill in Tranquility. The landfill is permitted to accept 2,200 tons per day and has a permitted capacity of 29.3 million cubic yards. The original closure date was 2031; however, due to enhanced recycling efforts, particularly on the part of the City of Fresno, the closure date has been extended to 2050. Therefore, Project compliance with applicable measures would promote regular collection and encourage the recycling of materials in accordance with the City's current capacity. The proposed Project's impact on solid waste will be *less than significant*.

## e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

**Less Than Significant Impact.** The proposed Project will be in compliance with federal, state and local management and reduction statutes related to solid waste. Any impacts are *less than significant.* 

#### Mitigation Measures

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	
<b>XX. WILDFIRE</b> – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:					
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				х	
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			Х		

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				Х
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				Х

#### DISCUSSION

## a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

**No Impact.** The proposed Project will be required to be in compliance with any adopted emergency response plan as part of the building permit process. There is *no impact.* 

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? **Less Than Significant Impact.** The proposed Project is located in a flat urban area developed with airport and industrial land uses, which precludes the risk of wildfire. The area is flat in nature which would limit the risk of downslope flooding and landslides, and limit any wildfire spread. As such, any wildfire risk to the project structures or people would be *less than significant*.

# c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

**No Impact**. The proposed Project is located in an area developed with industrial and urban uses. There are no aspects of this Project that would exacerbate fire risk. There is *no impact*.

# d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

**No Impact.** As discussed in Impact b) above, the proposed Project is located in an area dominated by urban uses and is relatively flat, which precludes the risk of downslope or downstream flooding. There is *no impact*.

#### Mitigation Measures

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact		
XIX. MANDATORY FINDINGS OF SIGNIFICANCE						

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			Х	
b) Does the project have impacts that are individually limited, but cumulatively co"siderable? ("Cumulatively"considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			Х	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			Х	

#### DISCUSSION

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?

**Less than Significant Impact.** The analyses of environmental issues contained in this Initial Study indicate that the proposed Project is not expected to have substantial impact on the environment or on any resources identified in the Initial Study. The applicable PEIR mitigation measures have been incorporated as described in each impact area to reduce all potentially significant impacts to *less than significant*.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Less than Significant Impact. CEQA Guidelines Section 15064(i) states that a Lead Agency shall consider whether the cumulative impact of a project is significant and whether the effects of the project are cumulatively considerable. The assessment of the significance of the cumulative effects of a project must, therefore, be conducted in connection with the effects of past projects, other current projects, and probable future projects. Due to the nature of the Project and consistency with environmental policies, incremental contributions to impacts are considered less than cumulatively considerable. All Project- related impacts were determined to be either less than significant, or less than significant after mitigation. The proposed Project would not contribute substantially to adverse cumulative conditions, or create any substantial indirect impacts (i.e., increase in population could lead to an increase need for housing, increase in traffic, air pollutants, etc.). Due to buildout of the area and existing land constraints, it is not anticipated that further substantial commercial or residential development will occur in the area in the foreseeable future. As such, Project impacts are not considered to be cumulatively considerable given the lack of proposed new development in the area and the insignificance of Project-induced impacts. The impact is therefore less than significant.

## c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

**Less than Significant Impact.** The analyses of environmental issues contained in this Initial Study indicate that the Project is not expected to have substantial impact on human beings, either directly or indirectly. Mitigation measures from the PEIR have been incorporated as described in each specific impact area which will reduce all potentially significant impacts to *less than significant*.

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#### Home Avenue Warehouse Project

#### Date: December 8, 2021

### Subject: Air Quality, Health Risk Analysis, Greenhouse Gas, and Energy Technical Memorandum

This Air Quality, Health Risk Analysis, Greenhouse Gas, and Energy Technical Memorandum was prepared to evaluate whether the estimated criteria air pollutant, ozone precursor, toxic air contaminant (TAC), and/or greenhouse gas (GHG) emissions generated from construction and/or operation of the Home Avenue Warehouse Project (proposed project or project) would cause significant impacts to air or GHG resources. The methodology follows the Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI) prepared by the San Joaquin Valley Air Pollution Control District (SJVAPCD) for the quantification of emissions and evaluation of potential impacts to air resources.<sup>1</sup> The GHG Analysis follows and the SJVAPCD's Guidance for Valley Land-Use Agencies in Addressing GHG Emission Impacts for New Projects under the California Environmental Quality Act (CEQA)<sup>2</sup> and the City of Fresno Greenhouse Gas Reduction Plan to determine significance.

#### **Project Location and Description**

The 10.25-acre property is located at 5255 E. Home Ave, Fresno, CA 93727 -APN: 455-201-24, APN: 455-201-38 and is zoned as IL-Light Industrial with similar planned use. Due to the location of the existing property line, a Lot Line Merger is being conducted to create one parcel. The proposed development consists of construction of a proposed warehouse of a concrete tilt-up shell building of approximately 162,650 square feet and associated parking and landscaping. Operations will be typical of other warehouse-style projects and will be assessed as a dry goods distribution center.

For the purposes of assessing environmental impacts, the proposed project was assessed for a proposed warehouse totaling 170,000 square feet.

The site plan for the proposed project is overlaid at the project location in Figure 1. The project's location and site plan are included as part of Attachment A.

<sup>&</sup>lt;sup>1</sup> San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed November 30, 2021.

<sup>&</sup>lt;sup>2</sup> San Joaquin Valley Air Pollution Control District (SJVAPCD). 2009. Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA. December 17. Website: https://www.valleyair.org/Programs/CCAP/12-17-09/3%20CCAP%20-%20FINAL%20LU%20Guidance%20-%20Dec%2017%202009.pdf. Accessed September 20, 2021.



#### Figure 1 – Proposed Project Site Plan Overlay

#### Local Setting

#### Air Quality

#### City of Fresno General Plan

Because the project is located within the City of Fresno, the City of Fresno's General Plan was reviewed. The City of Fresno General Plan includes the following policies related to air quality that are relevant to the proposed project.<sup>3</sup>

- **Policy RC-4-a:** Support Regional Efforts. Support and lead, where appropriate, regional, State and federal programs and actions for the improvement of air quality, especially the SJVAPCD's efforts to monitor and control air pollutants from both stationary and mobile sources and implement Reasonably Available Control Measures in the Ozone Attainment Plan.
- **Policy RC-4-b:** Conditions of Approval. Develop and incorporate air quality maintenance requirements, compatible with Air Quality Attainment and Maintenance Plans, as conditions of approval for General Plan amendments, community plans, Specific Plans, neighborhood plans, Concept Plans, and development proposals.
- **Policy RC-4-c:** Evaluate Impacts with Models. Continue to require the use of computer models used by SJVAPCD to evaluate the air quality impacts of plans and projects that require such environmental review by the City.

<sup>&</sup>lt;sup>3</sup> City of Fresno. 2014. City of Fresno General Plan. December. Website: https://www.fresno.gov/darm/general-plandevelopment-code/. Accessed October 30, 2021.

• **Policy RC-4-e**: Support Employer-Based Efforts. Support and promote employer implementation of staggered work hours and employee incentives to use carpools, public transit and other measures to reduce vehicular use and traffic congestion.

#### Greenhouse and Energy

#### City of Fresno General Plan

The City of Fresno General Plan was adopted in December 2014.<sup>4</sup> The City of Fresno General Plan includes the following objectives and policies related to GHG emissions and energy conservation that are relevant to the proposed project:

#### Objective

RC-5 In cooperation with other jurisdictions and agencies in the San Joaquin Valley Air Basin, take timely, necessary, and the most cost-effective actions to achieve and maintain reductions in greenhouse gas emissions and all strategies that reduce the causes of climate change in order to limit and prevent the related potential detrimental effects upon public health and welfare of present and future residents of the Fresno community.

#### **Implementing Policies**

- **RC-5-a** Support State Goal to Reduce Statewide GHG Emissions. As is consistent with State law, strive to meet AB 32 goal to reduce greenhouse gas emissions to 1990 levels by 2020 and strive to meet a reduction of 80 percent below 1990 levels by 2050 as stated in Executive Order S-03-05. As new statewide GHG reduction targets and dates are set by the State update the City's Greenhouse Gas Reduction Plan to include a comprehensive strategy to achieve consistency with those targets by the dates established.
- **RC-5-b** Greenhouse Gas Reduction Plan. As is consistent with State law, prepare and adopt a Greenhouse Gas Reduction Plan as part of the Master Environmental Impact Report to be concurrently approved with the Fresno General Plan in order to achieve compliance with State mandates, assist development by streamlining the approval process, and focus on feasible actions the City can take to minimize the adverse impacts of growth and development on global climate change. The Greenhouse Gas Reduction Plan shall include, but not be limited to:
  - A baseline inventory of all known or reasonably discoverable sources of GHGs that currently exist in the city and sources that existed in 1990.
  - A projected inventory of the GHGs that can reasonably be expected to be emitted from those sources in the year 2035 with implementation of this General Plan and foreseeable communitywide and municipal operations.
  - A target for the reduction of emissions from those identified sources.
  - A list of feasible GHG reduction measures to meet the reduction target, including energy conservation and "green building" requirements in municipal buildings and private development.

<sup>&</sup>lt;sup>4</sup> City of Fresno. 2014. City of Fresno General Plan. December. Website: https://www.fresno.gov/darm/general-plandevelopment-code/. Accessed October 30, 2021.

- Periodically update municipal and community-wide GHG emissions inventories to determine the efficacy of adopted measures and to guide future policy formulation needed to achieve and maintain GHG emissions reduction targets.
- **RC-5-c** GHG Reduction through Design and Operations. Increase efforts to incorporate requirements for GHG emission reductions in land use entitlement decisions, facility design, and operational measures subject to City regulation through the following measures and strategies:
  - Promote the expansion of incentive-based programs that involve certification of projects for energy and water efficiency and resiliency. These certification programs and scoring systems may include public agency "Green" and conservation criteria, Energy Star™ certification, CALGreen Tier 1 or Tier 2, Leadership in Energy Efficient Design (LEED™) certification, etc.
  - Promote appropriate energy and water conservation standards and facilitate mixeduse projects, new incentives for infill development, and the incorporation of mass transit, bicycle, and pedestrian amenities into public and private projects.
  - Require energy and water audits and upgrades for water conservation, energy efficiency, and mass transit, pedestrian, and bicycle amenities at the time of renovation, change in use, change in occupancy, and change in ownership for major projects meeting review thresholds specified in an implementing ordinance.
  - Incorporate the City's "Guidelines for Ponding Basin/Pond Construction and Management to Control Mosquito Breeding" as conditions of approval for any project using an on-site stormwater basin to prevent possible increases in vector-borne illnesses associated with global climate change.
  - Periodically evaluate the City's facility maintenance practices to determine whether there are additional opportunities to reduce GHGs through facility cleaning and painting, parks maintenance, road maintenance, and utility system maintenance.
  - Periodically evaluate standards and mitigation strategies for highly vehicle-dependent land uses and facilities, such as drive-through facilities and auto-oriented development.
- **RC-5-d** SCS and CAP Conformity Analysis. Ensure that the City includes analysis of a project's conformity to an adopted regional Sustainable Community Strategy or Alternative Planning Strategy (APS), an adopted Climate Action Plan (CAP), and any other applicable City and regional greenhouse gas reduction strategies in effect at the time of project review.
- **RC-5-e** Ensure Compliance. Ensure ongoing compliance with GHG emissions reduction plans and programs by requiring that air quality measures are incorporated into projects' design, conditions of approval, and mitigation measures.
- **RC-5-f** Toolkit. Provide residents and project applicants with a "toolkit" of generally feasible measures that can be used to reduce GHG emissions, including educational materials on energy-efficient and "climate-friendly" products.
- **RC-5-g** Evaluate Impacts with Models. Continue to use computer models such as those used by SJVAPCD to evaluate greenhouse gas impacts of plans and projects that require such review.

#### City of Fresno Greenhouse Gas Reduction Plan

The General Plan includes a Greenhouse Gas Reduction Plan (GHG Plan) that provides the City's primary strategy for reducing GHG emissions.<sup>5</sup> The intent of the GHG Plan is to achieve compliance with State GHG reduction mandates by focusing on feasible actions the City can take to minimize the adverse impacts of growth and development on climate change. The GHG Plan does not reinvent the wheel; rather, it builds on the General Plan policies and implementation measures. Where needed, the GHG Plan provides more details to clarify and focus action and to ensure implementation.

The GHG Plan established a target of reducing per capita GHG emissions in the City by 21.7 percent below 2020 business-as-usual (BAU) levels by 2020 and includes GHG reduction measures designed to achieve the reduction target. The GHG Plan was designed to be a "Qualified Plan," according to CEQA Guidelines Section 15183.5.2.

#### City of Fresno Greenhouse Gas Reduction Plan Update

A draft version of an updated GHG Plan was released in March 2020 and an updated draft was released as part of the recirculated Program Environmental Impact Report in March 2021; however, the Draft Updated GHG Plan is in draft form and is not currently adopted.<sup>6,7,8</sup> The following description of the Draft Updated GHG Plan is provided for informational purposes only. Since adoption of the GHG Plan, two significant regulations/decisions have been established. First, on September 28, 2016, Governor Brown signed SB 32 into law that sets a Statewide goal of reducing GHG emissions to 40 percent below 1990 levels by 2030. Additionally, on November 30, 2015, the California Supreme Court published its decision on the Newhall Ranch Specific Plan invalidating the EIR for a variety of reasons, including the use of a percent reduction below BAU as a threshold to determine significance of GHG emissions under CEQA without any supporting evidence. The GHG Plan Update ensures conformity with the mandates of California Supreme Court in the Newhall Ranch case and the State of California's latest GHG regulations. The GHG Plan Update re-evaluates the City's GHG reduction targets and existing reduction strategies from the 2014 GHG Plan. New goals and supporting measures are proposed to reflect and ensure compliance with changes in the local and State policies and regulations such as SB 32 and California's 2017 Climate Change Scoping Plan.

#### **Modeling Parameters and Assumptions**

The following modeling parameters and assumptions were used to generate criteria air pollutant, GHG, and TAC emissions for the proposed project.

#### Air Pollutants and GHGs Assessed

#### Criteria Pollutants Assessed

The following criteria air pollutants were assessed in this analysis: reactive organic gases (ROG),<sup>9</sup> oxides of nitrogen (NO<sub>x</sub>), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), particulate matter less than 10 microns in

<sup>&</sup>lt;sup>5</sup> City of Fresno. 2014. Fresno General Plan Update Greenhouse Gas Reduction Plan. July. Website: https://www.fresno.gov/darm/wp-content/uploads/sites/10/2016/11/F-2-Greenhouse-Gas-Reduction-Plan.pdf. Accessed October 30, 2021.

<sup>&</sup>lt;sup>6</sup> City of Fresno. 2020. Greenhouse Gas Reduction Plan Update. March. Website: https://www.fresno.gov/darm/wp-content/uploads/sites/10/2020/03/Appendix\_G-GHG\_Reduction\_Plan\_Update.pdf. Accessed October 30, 2021.

<sup>&</sup>lt;sup>7</sup> City of Fresno. 2021. Greenhouse Gas Reduction Plan Update. March. Website: https://www.fresno.gov/darm/wpcontent/uploads/sites/10/2021/03/Link4AppendixGGHGRPUpdate.pdf. Accessed October 30, 2021.

<sup>&</sup>lt;sup>8</sup> City of Fresno. 2021. Plan and Projects Under Review: Program Environmental Impact Report for the City of Fresno General Plan Amendment No. P19-04226. Accessed December 8, 2021.

<sup>&</sup>lt;sup>9</sup> Note: Although there are slight differences in the definition of ROGs and VOCs, the two terms are often used interchangeably. VOC = volatile organic compounds

diameter ( $PM_{10}$ ), and particulate matter less than 2.5 microns in diameter ( $PM_{2.5}$ ). Note that the proposed project would emit ozone precursors ROG and NO<sub>X</sub>. However, the proposed project would not directly emit ozone since it is formed in the atmosphere during the photochemical reaction of ozone precursors.

General descriptions and most relevant effects from pollutant exposure of the criteria pollutants of concern are listed below.

Criteria Pollutant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
Ozone	Ozone is a photochemical pollutant as it is not emitted directly into the atmosphere, but is formed by a complex series of chemical reactions between volatile organic compounds (VOC), nitrous oxides (NO <sub>X</sub> ), and sunlight. Ozone is a regional pollutant that is generated over a large area and is transported and spread by the wind.	Ozone is a secondary pollutant; thus, it is not emitted directly into the lower level of the atmosphere. The primary sources of ozone precursors (VOC and NO <sub>x</sub> ) are mobile sources (on-road and off-road vehicle exhaust).	Irritate respiratory system; reduce lung function; breathing pattern changes; reduction of breathing capacity; inflame and damage cells that line the lungs; make lungs more susceptible to infection; aggravate asthma; aggravate other chronic lung diseases; cause permanent lung damage; some immunological changes; increased mortality risk; vegetation and property damage.
Particulate matter (PM <sub>10</sub> ) Particulate matter (PM <sub>2.5</sub> )	Suspended particulate matter is a mixture of small particles that consist of dry solid fragments, droplets of water, or solid cores with liquid coatings. The particles vary in shape, size, and composition. PM <sub>10</sub> refers to particulate matter that is between 2.5 and 10 microns in diameter, (one micron is one-millionth of a meter). PM <sub>2.5</sub> refers to particulate matter that is 2.5 microns or less in diameter, about one-thirtieth the size of the average human hair.	Stationary sources include fuel or wood combustion for electrical utilities, residential space heating, and industrial processes; construction and demolition; metals, minerals, and petrochemicals; wood products processing; mills and elevators used in agriculture; erosion from tilled lands; waste disposal, and recycling. Mobile or transportation related sources are from vehicle exhaust and road dust. Secondary particles form from reactions in the atmosphere.	<ul> <li>Short-term exposure (hours/days): irritation of the eyes, nose, throat; coughing; phlegm; chest tightness; shortness of breath; aggravate existing lung disease, causing asthma attacks and acute bronchitis; those with heart disease can suffer heart attacks and arrhythmias.</li> <li>Long-term exposure: reduced lung function; chronic bronchitis; changes in lung morphology; death.</li> </ul>
Nitrogen dioxide (NO <sub>2</sub> )	During combustion of fossil fuels, oxygen reacts with nitrogen to produce nitrogen oxides—NOx (NO, NO <sub>2</sub> , NO <sub>3</sub> , N <sub>2</sub> O, N <sub>2</sub> O <sub>3</sub> , N <sub>2</sub> O <sub>4</sub> , and N <sub>2</sub> O <sub>5</sub> ). NOx is a precursor to ozone, PM <sub>10</sub> , and PM <sub>2.5</sub> formation.	NO <sub>x</sub> is produced in motor vehicle internal combustion engines and fossil fuel-fired electric utility and industrial boilers. Nitrogen dioxide forms quickly from NO <sub>x</sub>	Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and

Table 1: Descriptions of Criteria Pollutants of Concern

Criteria Pollutant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
	NO <sub>x</sub> can react with compounds to form nitric acid and related small particles and result in particulate matter (PM) related health effects.	emissions. NO <sub>2</sub> concentrations near major roads can be 30 to 100 percent higher than those at monitoring stations.	pulmonary structural changes; contributions to atmospheric discoloration; increased visits to hospital for respiratory illnesses.
Carbon monoxide (CO)	CO is a colorless, odorless, toxic gas. CO is somewhat soluble in water; therefore, rainfall and fog can suppress CO conditions. CO enters the body through the lungs, dissolves in the blood, replaces oxygen as an attachment to hemoglobin, and reduces available oxygen in the blood.	CO is produced by incomplete combustion of carbon-containing fuels (e.g., gasoline, diesel fuel, and biomass). Sources include motor vehicle exhaust, industrial processes (metals processing and chemical manufacturing), residential wood burning, and natural sources.	Ranges depending on exposure: slight headaches; nausea; aggravation of angina pectoris (chest pain) and other aspects of coronary heart disease; decreased exercise tolerance in persons with peripheral vascular disease and lung disease; impairment of central nervous system functions; possible increased risk to fetuses; death.
Sulfur dioxide (SO <sub>2</sub> )	Sulfur dioxide is a colorless, pungent gas. At levels greater than 0.5 parts per million (ppm), the gas has a strong odor, similar to rotten eggs. Sulfur oxides (SO <sub>X</sub> ) include sulfur dioxide and sulfur trioxide. Sulfuric acid is formed from sulfur dioxide, which can lead to acid deposition and can harm natural resources and materials. Although sulfur dioxide concentrations have been reduced to levels well below state and federal standards, further reductions are desirable because sulfur dioxide is a precursor to sulfate and PM <sub>10</sub> .	Human caused sources include fossil-fuel combustion, mineral ore processing, and chemical manufacturing. Volcanic emissions are a natural source of sulfur dioxide. The gas can also be produced in the air by dimethyl sulfide and hydrogen sulfide. Sulfur dioxide is removed from the air by dissolution in water, chemical reactions, and transfer to soils and ice caps. The sulfur dioxide levels in the State are well below the maximum standards.	Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient sulfur dioxide levels. It is not clear whether the two pollutants act synergistically or one pollutant alone is the predominant factor.
Source: U.S. Enviror pollutants. Accessed	nmental Protection Agency (EPA). Crit October 30, 2021.	teria Air Pollutants. Website: h	ttps://www.epa.gov/criteria-air-

#### GHGs Assessed

This analysis was restricted to GHGs identified by AB 32, which include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF<sub>6</sub>), and nitrogen trifluoride (NF<sub>3</sub>). The proposed project would generate a variety of GHGs, including several defined by AB 32 such as CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O.

Water vapor could be emitted from evaporated water used for landscaping and other uses, but this is not a significant impact because water vapor concentrations in the upper atmosphere are primarily due to climate feedbacks rather than emissions from project-related activities.

Ozone is a GHG; however, unlike the other GHGs, ozone in the troposphere is relatively short-lived and can be reduced in the troposphere on a daily basis. Stratospheric ozone can be reduced through reactions with other pollutants.

Certain GHGs defined by AB 32 would not be emitted by the project. Perfluorocarbons and sulfur hexafluoride are typically used in industrial applications, none of which would be used by the project. Therefore, it is not anticipated that the project would emit perfluorocarbons or sulfur hexafluoride.

Certain GHGs defined by AB 32 would not be emitted by the project. HFCs, PFCs, SF<sub>6</sub>, and NF<sub>3</sub> are typically used in certain industrial applications, none of which would be used for typical commercial or gas station operations. Therefore, it is not anticipated that the proposed project would emit those GHGs.

GHG emissions associated with the proposed project construction as well as future operations were estimated using  $CO_2$  equivalent ( $CO_2e$ ) emissions as a proxy for all GHG emissions. In order to obtain the  $CO_2e$ , an individual GHG is multiplied by its Global Warming Potential (GWP). The GWP designates on a pound for pound basis the potency of the GHG compared to  $CO_2$ .

#### Toxic Air Contaminants Assessed

#### **Toxic Air Contaminants**

A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations.

The California Almanac of Emissions and Air Quality—2009 Edition presents the relevant concentration and cancer risk data for the ten TACs that pose the most substantial health risk in California based on available data.<sup>10</sup> The ten TACs are acetaldehyde, benzene, 1.3-butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, perchloroethylene, and diesel particulate matter (DPM).

Some studies indicate that DPM poses the greatest health risk among the TACs listed above. A 10-year research program demonstrated that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic health risk.<sup>11</sup> In addition to increasing the risk of lung cancer, exposure to diesel exhaust can have other health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. Diesel exhaust is a major source of fine particulate pollution as well, and studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems.

#### DPM

For purposes of this study, DPM exhaust emissions are represented as PM<sub>10</sub>.

The project would generate passenger vehicle and truck trips from visitors traveling to and from the project site. In addition to visiting trucks, the project would also be served with truck deliveries (up to two trucks per day based on applicant-provided estimates). The main source of DPM from the long-term operations of the proposed project would be from combustion of diesel fuel in diesel-powered engines in on-road trucks, while additional DPM would be emitted from transportation refrigeration units (TRUs). On-

<sup>&</sup>lt;sup>10</sup> California Air Resources Board (CARB). 2009. The California Almanac of Emissions and Air Quality—2009 Edition. Website: https://www.arb.ca.gov/aqd/almanac/almanac09/almanac2009 all.pdf.

<sup>&</sup>lt;sup>11</sup> California Air Resources Board (CARB). 1998. The Toxic Air Contaminant Identification Process: Toxic Air Contaminant Emissions from Diesel-fueled Engines. Website: www.arb.ca.gov/toxics/dieseltac/factsht1.pdf.

site motor vehicle emissions refer to DPM exhaust emissions from the motor vehicle traffic that would travel and idle within the project site each day.

#### Asbestos

Asbestos is the name given to a number of naturally occurring fibrous silicate minerals that have been mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. The three most common types of asbestos are chrysotile, amosite, and crocidolite. Chrysotile, also known as white asbestos, is the most common type of asbestos found in buildings. Chrysotile makes up approximately 90 to 95 percent of all asbestos contained in buildings in the United States. Exposure to asbestos is a health threat; exposure to asbestos fibers may result in health issues such as lung cancer, mesothelioma (a rare cancer of the thin membranes lining the lungs, chest, and abdominal cavity), and asbestosis (a non-cancerous lung disease that causes scarring of the lungs). Exposure to asbestos for use in buildings. Exposure to naturally occurring asbestos can occur during soil-disturbing activities in areas with deposits present.

#### **Model Selection**

Air pollutant emissions can be estimated by using emission factors and a level of activity. Emission factors are the emission rate of a pollutant given the activity over time; for example, grams of NO<sub>X</sub> per horsepower-hour. CARB has published emission factors for on-road mobile vehicles/trucks in the EMFAC mobile source emissions model and emission factors for off-road equipment and vehicles in the OFFROAD emissions model. An air emissions model (or calculator) combines the emission factors and the various levels of activity and outputs the emissions for the various pieces of equipment.

The project is located in Fresno and within the San Joaquin Valley Air Basin. The modeling follows SJVAPCD guidance where applicable from its GAMAQI. The models used in this analysis are summarized as follows:

- Construction emissions: CalEEMod, version 2020.4.0
- Operational emissions: CalEEMod, version 2020.4.0
- EMFAC 2017
- American Meteorological Society/ Environmental Protection Agency Regulatory Model (AERMOD), version 19191

#### Criteria Pollutants and GHG Emissions

The California Emissions Estimator Model (CalEEMod) is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operations from a variety of land use projects. CalEEMod quantifies direct emissions from construction and operation activities (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. Further, CalEEMod identifies mitigation measures to reduce criteria pollutant and GHG emissions along with calculating the benefits achieved from measures chosen by the user.

CalEEMod was developed for the California Air Pollution Control Officers Association (CAPCOA) in collaboration with the California Air Districts. Default data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California Air Districts to account for local requirements and conditions.

CalEEMod is a comprehensive tool for quantifying air quality impacts from land use projects located throughout California. The model can be used for a variety of situations where an air quality analysis is necessary or desirable such as preparing CEQA or National Environmental Policy Act documents, conducting pre-project planning, and, verifying compliance with local air quality rules and regulations, etc.

CalEEMod version CalEEMod.2020.4.0 was used to estimate construction and operational impacts of the proposed project. CalEEMod version was the most recent version of CalEEMod at the time emissions were estimated (November 2021). Furthermore, the SJVAPCD is currently accepting and recommending the use of CalEEMod version CalEEMod.2020.4.0.

#### Assumptions

#### Construction Modeling Assumptions

Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and prevailing weather conditions. Construction emissions result from on-site and off-site activities. On-site emissions principally consist of exhaust emissions from the activity levels of heavy-duty construction equipment, motor vehicle operation, and fugitive dust (mainly  $PM_{10}$ ) from disturbed soil. Additionally, paving operations and application of architectural coatings would release VOC emissions. Off-site emissions are caused by motor vehicle exhaust from delivery vehicles, worker traffic, and road dust ( $PM_{10}$  and  $PM_{2.5}$ ).

#### Schedule

Based on estimates provided by the project applicant, the project was assumed to begin construction as early as January 2022 with buildout completed after twelve (12) months. CalEEMod includes default equipment lists and construction schedules. Where project-specific information was unknown, CalEEMod default values were used.

Table 2 shows the conceptual construction schedule for the proposed project. The construction schedule utilized in the analysis represents a "worst-case" analysis scenario since emission factors for construction equipment decrease as the analysis year increases, due to improvements in technology and more stringent regulatory requirements. Therefore, construction emissions would decrease if the construction schedule moved to later years. The duration of construction activity and associated equipment represent a reasonable approximation of the expected construction fleet as required per CEQA guidelines. The site-specific construction fleet may vary due to specific project needs at the time of construction.

Construction Task	Start Date	End Date	Workdays	Notes	
Site Preparation	1/3/2022	1/14/2022	10		
Grading	1/15/2022	2/25/2022	30		
Building Construction	2/26/2022	12/4/2022	200	Adjusted to match applicant- provided schedule	
Paving	2/26/2022	3/25/2022	20		
Architectural Coating	12/5/2022	12/30/2022	20		
Source: CalEEMod Output and Additional Supporting Information (Attachment A).					

#### **Table 2: Project Construction Schedule**

#### Equipment

Construction equipment for each construction activity is shown in Table 3.

Construction Task	Equipment Type	Pieces of Equipment	Usage (hours/day)	Horsepower	Load Factor	Fuel Type
	Rubber Tired Dozers	3	8	247	0.40	Diesel
Site Preparation	Tractors/Loaders/Backhoes	4	8	97	0.37	Diesel
	Excavators	2	8	158	0.38	Diesel
	Graders	1	8	187	0.41	Diesel
Grading	Rubber Tired Dozers	1	8	247	0.40	Diesel
	Scrapers	2	8	367	0.48	Diesel
	Tractors/Loaders/Backhoes	2	8	97	0.37	Diesel
	Cranes	1	7	231	0.29	Diesel
	Forklifts	3	8	89	0.20	Diesel
Building Construction	Generator Sets	1	8	84	0.74	Diesel
	Tractors/Loaders/Backhoes	3	7	97	0.37	Diesel
	Welders	1	8	46	0.45	Diesel
	Pavers	2	8	130	0.42	Diesel
Paving	Paving Equipment	2	8	132	0.36	Diesel
	Rollers	2	8	80	0.38	Diesel
Architectural Coating	Air Compressors	1	6	78	0.48	Diesel
Source: CalEEMod Outpu	It and Additional Supporting Information	ation (Attachme	ent A).	·		•

#### **Table 3: Project Construction Equipment**

#### Vehicles Trips

Table 4 provides a summary of the construction-related vehicle trips. CalEEMod default values were used to estimate the number of construction-related vehicle trips. Additional haul trips were added to each construction activity to account for the mobilization of off-road equipment. Additional vendor trips were included in the paving phase to account for delivery of materials.

The default values for hauling trips are based on the assumption that a truck can haul 20 tons (or 16 cubic yards) of material per load. If one load of material is delivered, CalEEMod assumes that one haul truck importing material will also have a return trip with an empty truck (e.g., 2 one-way trips).

The fleet mix for worker trips is light-duty passenger vehicles to light-duty trucks. The vendor trips fleet mix is composed of a mixture of medium and heavy-duty diesel trucks. The hauling trips were assumed to be 100 percent heavy-duty diesel truck trips. CalEEMod default trip lengths for a project in Fresno County and an urban setting were used for the construction trips.

Construction Task	Worker Trips per Day	Vendor Trips per Day	Total Haul Truck Trips
Site Preparation	18	0	44
Grading	20	0	516

#### **Table 4: Construction Vehicle Trips**

Building Construction	188	73	18				
Paving	15	4	12				
Architectural Coating	38	4	2				
Notes:							
Additional haul trips for mobilization/demobilization of on-site equipment. Haul trips included in site preparation for removal of billboard. Vendor trips added to the paving and architectural coating phases for delivery of materials.							

Source: CalEEMod Output and Additional Supporting Information (Attachment A).

#### **Operational Modeling Assumptions**

Operational emissions are those emissions that would occur during long-term operations of the proposed project.

#### **Motor Vehicles**

Motor vehicle emissions refer to exhaust and road dust emissions from the automobiles that would travel to and from the proposed project site.

Therefore, project trips for this analysis were based on trip rates from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10<sup>th</sup> Edition for the light industrial land use. Table 5 presents trip generation characteristics for projected trips for the Home Avenue Warehouse Project.

Description	Passenger Vehicles	Trucks	Total Daily Trips	
Daily Trips (trips per day)	202	94	296	
Fleet Mix	68.24%	31.76%	_	

#### **Table 5: Project Trip Generation Calculations**

Source of daily trip rate: Based on Institute of Transportation Engineers (ITE) Trip Generation Manual, 10<sup>th</sup> Edition rate for total daily trips. Trip rates were obtained for the Light Industrial ITE Land Use.

Source of fleet mix: Fleet mix adjusted based on warehouse studies to reflect similar land uses as included in the project. Specifically, the fleet mix was calculated by averaging the fleet mixes for the following land uses presented in the Fontana Truck Trip Generation Study: light warehouse, light industrial, heavy industrial, and industrial park. The Fontana Truck Trip Generation Study can be used to supplement ITE data and provides the following information:

- Total vehicle trip generation rates and equations; and
- Large truck mix (percentages for four classifications of vehicles).

Source of information obtained from the Fontana Truck Trip Generation Study: Appendix I of the San Bernardino County CMP, 2003 Update – Trip Generation Rates and Truck Percentages for Industrial and Warehouse Uses.

#### Trip Lengths and Vehicle Fleet Mix

The CalEEMod default round trip lengths for an urban setting in Fresno County were used in this analysis. Trip lengths are for primary trips. Trip purposes are primary, diverted, and pass-by trips. Diverted trips take a slightly different path than a primary trip. The CalEEMod default rates for percentages of primary, diverted, and pass-by trips were used.

The vehicle fleet mix is defined as the mix of motor vehicle classes active during the operation of the proposed project. Emission factors are assigned to the expected vehicle mix as a function of vehicle class, speed, and fuel use (gasoline- and diesel-powered vehicles).

Industrial land use projects, including warehouse projects, can be expected to have longer than average truck trip lengths compared to the default trip length in CalEEMod (7.3 miles to 9.5 miles for urban areas of Fresno County). To estimate mobile-source emissions from trucks during project operations, a one-way truck trip length of 50 miles was assumed based on recommendations from the SJVAPCD for industrial projects. To apply a longer trip length for trucks and to show a clear breakdown of emissions to show a clear breakdown of emissions, modeling of the project's operations was split into two separate CalEEMod runs: (1) area-source emissions, energy-source emissions, and passenger vehicle mobile-source emissions; and (2) truck mobile-source emissions. The vehicle types in the first operational run were adjusted so that only passenger vehicles were represented, while the second run included trucks only. The adjusted fleet mixes used the CalEEMod default fleet mix as the basis; the calculations for the adjusted fleet mix are included as part of Attachment A.

#### Transportation Refrigeration Units

As no cold storage is envisioned as part of the proposed project, it is not anticipated that any trucks would be equipped with a Transportation Refrigeration Unit (TRU).

#### Area Sources

#### **Consumer Products**

Consumer products are various solvents used in non-industrial applications, which emit VOCs during their product use. "Consumer Product" means a chemically formulated product used by household and institutional consumers, including but not limited to: detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. It does not include other paint products, furniture coatings, or architectural coatings. CalEEMod includes default consumer product use rates based on building square footage. The default emission factors developed for CalEEMod were used for consumer products associated with parking uses and the general consumer product category.

#### Architectural Coatings (Painting)

Paints release VOC emissions during application and drying. The buildings in the project would be repainted on occasion. The project is required to comply with the SJVAPCD Rule 4601—Architectural Coatings. The rule required flat paints to meet a standard of 50 grams per liter (g/l) and gloss paints 100 g/l by 2012 for an average rate of 65 g/l. Effective January 1, 2022, nonflat gloss and semigloss paints will also be required to meet the 50 g/l standard, providing lower VOC emissions for buildings constructed after that date. Therefore, the analysis uses the 50 g/l emission factor for the analysis.

#### Landscaping Emissions

CalEEMod estimates a total of 180 days for which landscaping equipment would be used to estimate potential emissions for the proposed project.

#### Indirect Emissions

For GHG emissions, CalEEMod contains calculations to estimate indirect GHG emissions. Indirect emissions are emissions where the location of consumption or activity is different from where actual emissions are generated. For example, electricity would be consumed at the proposed project site; however, emissions associated with producing that electricity are generated off-site at a power plant. Since the electricity can vary greatly based on locations, the user should override these values if they have more specific information regarding their specific water supply and treatment.

Energy Use

The emissions associated with the building electricity and natural gas usage (non-hearth) were estimated based on the land use type and size. Values for a project served by Pacific Gas and Electric (PG&E) were used in the analysis.

The carbon dioxide intensity factor for Pacific Gas & Electric (from the CEC's year 2006 data) is as follows:

• Carbon dioxide: 641.35 pounds per megawatt hour (lbs/MWh)

The Renewable Electricity Standards took effect in 2020. The Renewable Electricity Standard requires that electricity providers include a minimum of 33 percent renewable energy in their portfolios by the year 2020. Pacific Gas & Electric provides estimates of its emission factor per megawatt hour of electricity delivered to its customers. PG&E provides emission factors for the electricity it provides to customers for its energy portfolio that is used to estimate project emissions. CalEEMod 2020.4.0 includes PG&E emission factor based on actual rates reported by the utility.

The 2020.4.0 CalEEMod default emission factors for PG&E are as follows:

- Carbon dioxide: 203.98 lbs/MWh
- Methane: 0.033 lb/MWh
- Nitrous oxide: 0.004 lb/MWh

The utilities in California will be required to increase the use of renewable energy sources to 60 percent by 2030.

#### Other Indirect Emissions (Water Use, Wastewater Use, and Solid Waste)

CalEEMod includes calculations for indirect GHG emissions for electricity consumption, water consumption, and solid waste disposal. For water consumption, CalEEMod calculates embedded energy (e.g., treatment, conveyance, distribution) associated with providing each gallon of potable water to the project. For solid waste disposal, GHG emissions are associated with the disposal of solid waste generated by the proposed project into landfills. CalEEMod default data were used for inputs associated with solid waste.

#### Yard Tractor

It is anticipated that a yard tractor would be used to move trailers for four (4) to six (6) hours per day. Emissions from the on-site use of a yard tractor were estimated using emission factors from CARB Offroad 2017. For the purposes of providing a conservative estimate, it was assumed that the yard tractor would be used for six (6) hours per day and seven (7) days a week. The calculations used to estimate emissions from the use of an on-site yard tractor are included as part of Attachment A.

#### Stationary Equipment

No stationary sources are included as part of the proposed project. If stationary sources are considered in the future, SJVAPCD permits for stationary emission sources would be required. Any future equipment would need to meet SJVAPCD emission limits for regulated pollutants pursuant to Rule 2201.

#### Vegetation

There is currently limited carbon sequestration occurring in the portion of the site where construction will occur in the form of existing shrubbery. Landscaping is proposed near the perimeter of the project site and will meet requirements set forth by the City of Fresno. For this analysis, it was assumed that the loss

and addition of carbon sequestration that are due to the proposed project would be balanced; therefore, emissions due to carbon sequestration were not included.

#### Refrigerants

No new buildings requiring cold storage are envisioned as part of proposed project. Buildings equipped with air conditioning systems would utilize small systems not subject to CARB's Refrigeration Management Program.

#### Health Risk Assessment Assumptions

An HRA was completed to evaluate potential health risks associated with the generation of TACs during operational activities associated with the proposed project. Assumptions used in the HRA are summarized below, while complete calculations parameters are provided as part of Attachment B.

#### Model Selection and Parameters

An air dispersion model is a mathematical formulation used to estimate the air quality impacts at specific locations (receptors) surrounding a source of emissions given the rate of emissions and prevailing meteorological conditions. The air dispersion model applied in this assessment was the United States Environmental Protection Agency (EPA) AERMOD (version 19191) air dispersion model. Specifically, AERMOD was used to estimate levels of air emissions at sensitive receptor locations from potential sources of project-generated TACs. The use of AERMOD provides a refined methodology for estimating construction impacts by utilizing long-term, measured representative meteorological data for the project site and a representative construction schedule.

The modeling analysis also considered the spatial distribution and elevation of each emitting source in relation to the sensitive receptors. Direction-dependent calculations were obtained by identifying the Universal Transverse Mercator (UTM) coordinates for each source location. Terrain elevations were obtained for the project site using the AERMAP model, the AERMOD terrain data pre-processor. Specifically, National Elevation dataset (NED) data for the area were obtained and included in the model runs to account for complex terrain. The air dispersion model assessment used meteorological data from the Fresno 93193 Station. The meteorological data used was preprocessed for use with AERMOD by the SJVAPCD and included data for the years 2013 to 2017; all years were used in the assessment. To evaluate the proposed project's localized impacts at the point of maximum impact, all receptors were placed within the breathing zone at zero meters above ground level.

Emissions were assumed to occur over a 24-hour-per-day, 365 day-per-year averaging period. It is anticipated that operational times will be typical of other warehouse-style projects, with truck deliveries that could occur any time in a 24-hour period. Detailed parameters and complete calculations are contained in Attachment B. Attachment B also includes a representation of the DPM modeling parameters, including modeled on-site vehicle travel, vehicle idling locations, and locations of sensitive receptors within approximately 1,000 feet of the project boundary.

#### Air Toxics Generated during Operations—DPM

The project would generate passenger vehicle and truck trips from visitors, vendors, and employees traveling to and from the project site. Customers visits to the property are expected to be limited, since the proposed operations is expected to involve warehouse use for the distribution of goods. The main source of DPM from the long-term operations of the proposed project would be from combustion of diesel fuel in diesel-powered engines in on-road trucks. On-site motor vehicle emissions refer to DPM exhaust emissions from the motor vehicle traffic that would travel and idle within the project site each day.

The vehicle fleet mix for trucks would consist of Light-Heavy-Duty truck (LHDT), Medium-Heavy-Duty truck (MHDT), and Heavy-Heavy-Duty truck (HHDT). For the purpose of emissions, it was assumed that the truck fleet mix would consist of 100 percent heavy-heavy duty (4+ axle) trucks. Emission factors are assigned to the expected vehicle mix as a function of vehicle age, vehicle class, speed, and fuel type. The operational fleet mix used to assess emissions from the proposed project is included in as part of Attachment A.

Each operational emission source to be evaluated requires geometrical and emission release specifications for use in the air dispersion model. The emission source configurations applied in this assessment of operational DPM emissions are shown in Table 6.

Emission Source Type	Relevant Assumptions
On-site Truck Traffic	<ul> <li>Configuration: line volume sources</li> <li>Release height: 10.2 feet (3.1 meters)</li> <li>Vehicle Speed: 5 mph</li> <li>Vehicle types: heavy-heavy duty trucks (HHDT)</li> <li>Emission factors: EMFAC 2017</li> </ul>
On-site Truck Idling	<ul> <li>Configuration: three line volume sources and one volume source; of the four sources, two were used to cover the parking areas and two were used to cover the docking areas</li> <li>Release height: 10.2 feet (3.1 meters)</li> <li>Vehicle type: HHDT diesel trucks</li> <li>Emission factors: EMFAC 2017</li> <li>Number of diesel truck idling instances per day: 188 (based on one occurrence per truck trip at parking area and one occurrence in docking area</li> </ul>
Off-site Truck Traffic	<ul> <li>Configuration: line volume source</li> <li>One travel links from the project to outlying areas within 1,000 feet of the project site was identified</li> <li>Vehicle speeds: 25 mph (trucks)</li> <li>Vehicle type: HHDT diesel trucks</li> <li>Emission factors: EMFAC 2017</li> </ul>
Facility Operations	<ul> <li>365 days per year, 24 hours per day</li> </ul>
Source: Attachment	В.

Table 6: Summary of Select Operational Emission Source Configurations

Operational emissions for the proposed project were assessed assuming the first year of operations would occur in 2023. Exhaust emissions of DPM (as PM<sub>10</sub> exhaust) were estimated using EMFAC2017. It was assumed that emission factors were constant for the years beyond 2023, which provides a conservative estimate of DPM emissions and associated health risks. DPM emissions are expected to decline as older higher polluting vehicles continue to be replaced by newer cleaner vehicles. This decline is not fully accounted for in the HRA completed for the proposed project. The emission factors, AERMOD data, and emission estimation spreadsheets used to estimate motor vehicle DPM emissions during project operations are provided in Attachment B.

#### Cancer Risk

The model was run to obtain annual average concentration in micrograms per cubic meter [ $\mu$ g/m<sup>3</sup>] at residential sensitive receptor locations. Consistent with SJVAPCD guidance, a health risk computation was performed to determine the risk of developing an excess cancer risk calculated on a 70-year exposure scenario. The chronic and carcinogenic health risk calculations are based on the standardized equations contained in the U.S. EPA Human Health Evaluation Manual (1991) and the OEHHA Guidance Manual.<sup>12,13</sup>

Based on the OEHHA methodology, the residential inhalation cancer risk from the annual average DPM concentrations is calculated by multiplying the daily inhalation or oral dose, by a cancer potency factor, the age sensitivity factor (ASF), the frequency of time spent at home (for residents only), and the exposure duration divided by averaging time, to yield the excess cancer risk. These factors are discussed in more detail below. Cancer risk must be separately calculated for specified age groups, because of age differences in sensitivity to carcinogens and age differences in intake rates (per kg body weight). Separate risk estimates for these age groups provide a health-protective estimate of cancer risk by accounting for greater susceptibility in early life, including both age-related sensitivity and amount of exposure.

Exposure through inhalation (Dose-air) is a function the breathing rate, the exposure frequency, and the concentration of a substance in the air. For residential exposure, the breathing rates are determined for specific age groups, so Dose-air is calculated for each of these age groups, 3<sup>rd</sup> trimester, 0<2, 2<9, 2<16, 16<30 and 16-70 years. To estimate cancer risk, the dose was estimated by applying the following formula to each ground-level concentration:

Dose-air =  $(C_{air} * \{BR/BW\} * A * EF * 10^{-6})$ 

Where:

vilere.		
Dose-air	=	dose through inhalation (mg/kg/day)
Cair	=	air concentration (µg/m³) from air dispersion model
{BR/BW}	=	daily breathing rate normalized to body weight (L/kg body weight – day) (361 L\kg BW-day for 3 <sup>rd</sup> Trimester, 1,090 L/kg BW-day for 0<2 years, 631 L/kg BW- day for 2<9 years, 572 L/kg BW-day for 2<16 years, 261 L/kg BW-day for 16<30 years, and 233 L/kg BW-day 16<70 years)
A	=	Inhalation absorption factor (unitless [1])
EF	=	exposure frequency (unitless), days/365 days (0.96 [approximately 350 days
		per year])
10 <sup>-6</sup>	=	conversion factor (micrograms to milligrams, liters to cubic meters)

OEHHA developed ASFs to take into account the increased sensitivity to carcinogens during early-in-life exposure. In the absence of chemical-specific data, OEHHA recommends a default ASF of 10 for the

<sup>&</sup>lt;sup>12</sup> U.S. Environmental Protection Agency (EPA). 1991. Human Health Evaluation Manual. Website:

https://www.epa.gov/sites/default/files/2015-11/documents/defaultExposureParams.pdf. Accessed October 12, 2021.
 <sup>13</sup> California Office of Environmental Health Hazards Assessment (OEHHA). 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines. Guidance Manual for Preparation of Health Risk Assessments. February. Website:

http://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf. Accessed November 13, 2021.

third trimester to age 2 years, an ASF of 3 for ages 2 through 15 years to account for potential increased sensitivity to carcinogens during childhood and an ASF of 1 for ages 16 through 70 years.

Fraction of time at home (FAH) during the day is used to adjust exposure duration and cancer risk from a specific facility's emissions, based on the assumption that exposure to the facility's emissions are not occurring away from home. The following FAH values were used in this assessment:

- From the third trimester to age <2 years: 100 percent (the OEHHA-recommended value is 85 percent of time is spent at home; however, 100 percent was assumed in order to present a conservative analysis);
- From age 2 through <16 years: 100 percent (the OEHHA-recommended value is 72 percent of time is spent at home; however, 100 percent was assumed in order to present a conservative analysis); and
- From age 16 years and greater: 73 percent (the OEHHA-recommended value is 73 percent of time is spent at home).

To estimate the cancer risk, the dose is multiplied by the cancer potency factor, the ASF, the exposure duration divided by averaging time, and the frequency of time spent at home (for residents only):

Risk<sub>inh-res</sub> = (Dose<sub>air</sub> \* CPH \* ASF \* ED/AT \* FAH)

Where:

Risk <sub>inh-res</sub>	=	residential inhalation cancer risk (potential chances per million)
Dose <sub>air</sub>	=	daily dose through inhalation (mg/kg-day)
CPF	=	inhalation cancer potency factor (mg/kg-day-1)
ASF	=	age sensitivity factor for a specified age group (unitless)
ED	=	exposure duration (in years) for a specified age group
AT	=	averaging time of lifetime cancer risk (years)
FAH	=	fraction of time spent at home (unitless)

#### **Chronic Non-Cancer Hazard**

Non-cancer chronic impacts are calculated by dividing the annual average concentration by the Reference Exposure Level (REL) for that substance. The REL is defined as the concentration at which no adverse non-cancer health effects are anticipated. The following equation was used to determine the non-cancer risk:

Hazard Quotient = C<sub>i</sub>/REL<sub>i</sub>

Where:

Ci	=	Concentration in the air of substance i (annual average concentration in
		μg/m³)
RELi	=	Chronic noncancer Reference Exposure Level for substance i (µg/m <sup>3</sup> )

#### Thresholds

Air pollutant emissions have regional effects and localized effects. This analysis assesses the regional effects of the project's criteria pollutant emissions in comparison to SJVAPCD thresholds of significance for short-term construction activities and long-term operation of the project. Localized emissions from project construction and operation are also assessed using concentration-based thresholds that determine if the project would result in a localized exceedance of any ambient air quality standards or would make a cumulatively considerable contribution to an existing exceedance.

The primary pollutants of concern during project construction and operation are ROG, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. The SJVAPCD GAMAQI adopted in 2015 contains thresholds for ROG and NO<sub>x</sub>; SO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>.

Ozone is a secondary pollutant that can be formed miles away from the source of emissions through reactions of ROG and NO<sub>X</sub> emissions in the presence of sunlight. Therefore, ROG and NO<sub>X</sub> are termed ozone precursors. The San Joaquin Valley Air Basin (SJVAB) often exceeds the state and national ozone standards. Therefore, if the project emits a substantial quantity of ozone precursors, the project may contribute to an exceedance of the ozone standard. The SJVAB also exceeds air quality standards for PM<sub>10</sub>, and PM<sub>2.5</sub>; therefore, substantial project emissions may contribute to an exceedance for these pollutants.

The SJVAPCD adopted significance thresholds for construction-related and operational ROG, NO<sub>X</sub>, PM, CO, and SO<sub>X</sub>, these thresholds are included in Table 7.

	Significance Threshold				
Pollutant	Construction Emissions (tons/year)	Operational Emission (tons/year)			
со	100	100			
NO <sub>X</sub>	10	10			
ROG	10	10			
SOx	27	27			
PM <sub>10</sub>	15	15			
PM <sub>2.5</sub>	15	15			
Source: SJVAPCD. 2015. Guidance for As	sessing and Mitigating Air Quality Impacts	. Website:			

Table 7: SJVAPCD Proposed Project-Level Air Quality CEQA Thresholds of Significance

Source: SJVAPCD. 2015. Guidance for Assessing and Mitigating Air Quality Impacts. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed November 30, 2021.

#### **Fugitive Dust**

#### **Construction**

Fugitive dust would be generated from site grading and other earth-moving activities. Most of this fugitive dust would remain localized and would be deposited near the project site. However, the potential for

impacts from fugitive dust exists unless control measures are implemented to reduce the emissions from the project site. Therefore, adherence to Regulation VIII would be required during construction of the proposed project. Regulation VIII would require fugitive dust control measures that are consistent with best management practices (BMPs) established by the SJVAPCD to reduce the proposed project's construction-generated fugitive dust impacts to a less than significant level.

The SJVAPCD (SJVAPCD or District) adopted Regulation VIII in 1993 and its most recent amendments became effective on October 1, 2004. This is a basic summary of the regulation's requirements as they apply to construction sites. These regulations affect all workers at a regulated construction site, including everyone from the landowner to the subcontractors. Violations of Regulation VIII are subject to enforcement action including fines.<sup>14</sup>

**Visible Dust Emissions** may not exceed 20 percent opacity during periods when soil is being disturbed by equipment or by wind at any time. Visible Dust Emissions opacity of 20 percent means dust that would obstruct an observer's view of an object by 20 percent. District inspectors are state certified to evaluate visible emissions. Dust control may be achieved by applying water before/during earthwork and onto unpaved traffic areas, phasing work to limit dust, and setting up wind fences to limit windblown dust.

**Soil Stabilization** is required at regulated construction sites after normal working hours and on weekends and holidays. This requirement also applies to inactive construction areas such as phased projects where disturbed land is left unattended. Applying water to form a visible crust on the soil and restricting vehicle access are often effective for short-term stabilization of disturbed surface areas. Long-term methods including applying dust suppressants and establishing vegetative cover.

**Carryout and Trackout** occur when materials from emptied or loaded vehicles falls onto a paved surface or shoulder of a public road or when materials adhere to vehicle tires and are deposited onto a paved surface or shoulder of a public road. Should either occur, the material must be cleaned up at least daily, and immediately if it extends more than 50 feet from the exit point onto a paved road. The appropriate clean-up methods require the complete removal and cleanup of mud and dirt from the paved surface and shoulder. Using a blower device or dry sweeping with any mechanical device other than a PM<sub>10</sub>-efficient street sweeper is a violation. Larger construction sites, or sites with a high amount of traffic on one or more days, must prevent carryout and trackout from occurring by installing gravel pads, grizzlies, wheel washers, paved interior roads, or a combination thereof at each exit point from the site. In many cases, cleaning up trackout with water is also prohibited as it may lead to plugged storm drains. Prevention is the best method.

**Unpaved Access and Haul Roads**, as well as unpaved vehicle and equipment traffic areas at construction sites must have dust control. Speed limit signs limiting vehicle speed to 15 mph or less at construction sites must be posted every 500 feet on uncontrolled and unpaved roads.

**Storage Piles and Bulk Materials** have handling, storage, and transportation requirements that include applying water when handling materials, wetting or covering stored materials, and installing wind barriers to limit visible dust emissions. Also, limiting vehicle speeds, loading haul trucks with a freeboard of six inches or greater along with applying water to the top of the load, and covering the cargo compartments are effective measures for reducing visible dust emissions and carryout from vehicles transporting bulk materials.

**Dust Control Plans** identify the dust sources and describe the dust control measures that will be implemented before, during, and after any dust generating activity for the duration of the project. Owners

<sup>&</sup>lt;sup>14</sup> San Joaquin Valley Air Pollution Control District (SJVAPCD). 2007. Compliance Assistance Bulletin. Website: http://www.valleyair.org/busind/comply/pm10/forms/RegVIIICAB.pdf. Accessed May 29, 2021.

or operators are required to submit plans to the SJVAPCD at least 30 days prior to commencing the work for the following:

- Residential developments of ten or more acres of disturbed surface area.
- Non-residential developments of five or more acres of disturbed surface area.
- The relocation of more than 2,500 cubic yards per day of materials on at least three days.

Operations may not commence until the SJAVPCD has approved the Dust Control Plan. A copy of the plan must be on site and available to workers and District employees. All work on the site is subject to the requirements of the approved dust control plan. A failure to abide by the plan by anyone on site may be subject to enforcement action. Owners or operators of construction projects that are at least one acre in size and where a Dust Control Plan is not required, must provide written notification to the SJVAPCD at least 48 hours in advance of any earthmoving activity.

**Record Keeping** is required to document compliance with the rules and must be kept for each day any dust control measure is used. The SJVAPCD has developed record forms for water application, street sweeping, and "permanent" controls such as applying long term dust palliatives, vegetation, ground cover materials, paving, or other durable materials. Records must be kept for one year after the end of dust generating activities (Title V sources must keep records for five years).

**Exemptions** exist for several activities. Those occurring above 3,000 feet in elevation are exempt from all Regulation VIII requirements. Further, Rule 8021 – Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities exempts the following construction and earthmoving activities:

• Blasting activities permitted by California Division of Industrial Safety.

• Maintenance or remodeling of existing buildings provided the addition is less than 50% of the size of the existing building or less than 10,000 square feet (due to asbestos concerns, contact the SJVAPCD at least two weeks ahead of time).

- Additions to single family dwellings.
- The disking of weeds and vegetation for fire prevention on sites smaller than 1/2 acre.
- Spreading of daily landfill cover to preserve public health and safety and to comply with California Integrated Waste Management Board requirements.

**Nuisances** are prohibited at all times because District Rule 4102 – Nuisance applies to all construction sources of fugitive dust, whether or not they are exempt from Regulation VIII. It is important to monitor dust-generating activities and implement appropriate dust control measures to limit the public's exposure to fugitive dust.

**Rule 2201—New and Modified Stationary Source Review Rule.** The review of new and modified Stationary Sources of air pollution and to provide mechanisms including emission trade-offs by which Authorities to Construct such sources may be granted, without interfering with the attainment or maintenance of Ambient Air Quality Standards.

#### **Criteria Pollutant Emission Estimates**

#### Construction Emissions (Regional)

Construction emissions associated with the project are shown in Table 8. As shown in Table 8, the emissions are below the significance thresholds and, therefore, are less than significant on a project basis.

Emissions	Emissions (Tons/Year)							
Source	ROG	NOx	СО	SOx	<b>PM</b> 10	PM <sub>2.5</sub>		
Site Preparation	0.02	0.17	0.10	<0.01	0.05	0.03		
Grading	0.06	0.62	0.45	<0.01	0.09	0.05		
Building Construction	0.25	2.00	2.23	0.01	0.28	0.13		
Paving	0.02	0.11	0.15	<0.01	0.01	0.01		
Architectural Coating	0.45	0.02	0.03	<0.01	<0.01	<0.01		
Project Total	0.80	2.92	2.96	0.01	0.44	0.22		
Significance Thresholds	10	10	100	27	15	15		
Exceed Significance Thresholds?	No	No	No	No	No	No		

#### Table 8: Summary of Construction-Generated Emissions of Criteria Air Pollutants – Unmitigated

Notes:

 $PM_{10}$  and  $PM_{2.5}$  emissions are from the mitigated output to reflect compliance with Regulation VIII—Fugitive  $PM_{10}$  Prohibitions.

Source of Emissions: CalEEMod Output and Additional Supporting Information (Attachment A).

Totals may not appear to sum exactly due to rounding.

Source of Thresholds: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed November 30, 2021.

#### Operational Emissions (Regional)

Operational emissions occur over the lifetime of the project. Operational emissions are shown in Table 9. The SJVAPCD considers construction and operational emissions separately when making significance determinations.

The emissions output for project operation at full buildout for 2023 are summarized in Table 9. As shown in Table 9, the operational emissions would be less than the thresholds of significance for all criteria air pollutants.

Source	Emissions (tons/year)							
	ROG	NOx	СО	SOx	<b>PM</b> 10	PM <sub>2.5</sub>		
Area	0.72	<0.01	<0.01	<0.01	<0.01	<0.01		
Energy	0.02	0.15	0.13	<0.01	0.01	0.01		
Mobile (Passenger Vehicles)	0.06	0.06	0.66	<0.01	0.22	0.06		
Mobile (Trucks)	0.06	4.85	0.70	0.02	0.78	0.25		
Yard Tractor	<0.001	0.027	<0.001	<0.001	0.002	0.002		

#### Table 9: Summary of Operational Emissions of Criteria Air Pollutants – Unmitigated

Annual Total (2023)	0.86	5.09	1.49	0.02	1.01	0.32
Significance Thresholds	10	10	100	27	15	15
Exceed Significance Thresholds?	No	No	No	No	No	No

Notes:

Emissions were quantified using CalEEMod based on project details and estimated operating year for the proposed project. Totals may not sum exactly due to rounding.

Source: CalEEMod Output and Additional Supporting Information (Attachment A).

#### Localized Impacts

Emissions occurring at or near the project have the potential to create a localized impact also referred to as an air pollutant hotspot. Localized emissions are considered significant if when combined with background emissions, they would result in exceedance of any health-based air quality standard. In locations that already exceed standards for these pollutants, significance is based on a significant impact level (SIL) that represents the amount that is considered a cumulatively considerable contribution to an existing violation of an air quality standard. The pollutants of concern for localized impact in the SJVAB are NO<sub>2</sub>, SO<sub>x</sub>, and CO.

The SJVAPCD has provided guidance for screening localized impacts in the GAMAQI that establishes a screening threshold of 100 pounds per day of any criteria pollutant. If a project exceeds 100 pounds per day of any criteria pollutant, then ambient air quality modeling would be necessary. If the project does not exceed 100 pounds per day of any criteria pollutant, then it can be assumed that it would not cause a violation of an ambient air quality standard.

#### Construction: Localized Concentrations of PM<sub>10</sub>, PM<sub>2.5</sub>, CO, and NO<sub>X</sub>

Local construction impacts would be short-term in nature lasting only during the duration of construction. As shown in Table 10 below, on-site construction emissions would be less than 100 pounds per day for each of the criteria pollutants. To present a conservative estimate, on-site emissions for on-road construction vehicles were included in the localized analysis. Based on the SJVAPCD's guidance, the construction emissions would not cause an ambient air quality standard violation.
Courses	On-site Emissions (pounds per day)			
Source	NOx	СО	<b>PM</b> 10	PM <sub>2.5</sub>
Site Preparation	33.20	19.91	10.47	6.03
Grading	39.26	29.47	5.80	3.15
Building Construction	16.86	18.50	0.91	0.79
Paving	11.21	14.74	0.58	0.52
Architectural Coating	1.50	2.14	0.10	0.09
Overlap Paving & Building Construction	28.07	33.25	1.48	1.32
Maximum Daily On-site Emissions	39.26	33.25	10.47	6.03
Significance Thresholds	100	100	100	100
Exceed Significance Thresholds?	No	No	No	No

#### Table 10: Localized Concentrations of PM<sub>10</sub>, PM<sub>2.5</sub>, CO, and NO<sub>X</sub> for Construction

Note: Overlap of construction activities is based on the construction schedule shown in Table 2 and Attachment A.

Source of Emissions: CalEEMod Output and Additional Supporting Information (Attachment A).

Source of Thresholds: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed November 30, 2021.

#### Operation: Localized Concentrations of PM<sub>10</sub>, PM<sub>2.5</sub>, CO, and NO<sub>X</sub>

Localized impacts could occur in areas with a single large source of emissions such as a power plant or with multiple sources concentrated in a small area such as a distribution center. The maximum daily operational emissions would occur at project buildout, which was assumed to occur in 2023. Operational emissions include those generated on-site by area sources such as consumer products, and landscape maintenance, energy use from natural gas combustion, and motor vehicles operation at the project site. Motor vehicle emissions are estimated for on-site operations using trip lengths for on-site travel. The trip lengths used to analyze on-site emissions was selected by measuring possible on-site paths using Google Earth; the length for the longest measured route was selected to present a conservative estimate of on-site emissions.

As shown in Table 11 below, Operational modeling of on-site emissions for the project indicate that the project would not exceed 100 pounds per day for each of the criteria pollutants. Therefore, based on the SJVAPCD's guidance, the operational emissions would not cause an ambient air quality standard violation. As such, impacts would be less than significant.

Course	On-site Emissions (pounds per day)			
Source	NOx	СО	<b>PM</b> <sub>10</sub>	PM <sub>2.5</sub>
Area	<0.01	0.04	<0.01	<0.01
Energy	0.82	0.69	0.06	0.06
Mobile - Passenger Vehicles Trips	0.13	1.47	0.07	0.02
Mobile - Truck Trips	2.05	1.60	0.04	0.01
Yard Tractor	0.15	<0.01	0.01	0.01
Total	3.15	3.80	0.18	0.10
Significance Thresholds	100	100	100	100
Exceed Significance Thresholds?	No	No	No	No

#### Table 11: Localized Concentrations of PM<sub>10</sub>, PM<sub>2.5</sub>, CO, and NO<sub>X</sub> for Operations

Source of Emissions: CalEEMod Output and Additional Supporting Information (Attachment A). Maximum daily emissions of NO<sub>X</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> were highest in the Winter scenario.

Source of Thresholds: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed November 30, 2021.

#### Addressing Air Quality CEQA Impact Questions

#### Table 12: Summary of Air Quality Impact Analysis

Air Quality

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

Would the project:	Significance Finding
a) Conflict with or obstruct implementation of the applicable air quality plan?	Less than Significant Impact
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard?	Less than Significant Impact
c) Expose sensitive receptors to substantial pollutant concentrations?	Less than Significant Impact
d) Result in other emissions (such as those leading to odors or) adversely affecting a substantial number of people?	Less than Significant Impact

#### a) Conflict with or obstruct implementation of the applicable air quality plan?

#### Less Than Significant Impact.

Air Quality Plans (AQPs) are plans for reaching attainment of air quality standards. The assumptions, inputs, and control measures are analyzed to determine if the Air Basin can reach attainment for the ambient air quality standards. The proposed Project site is located within the jurisdictional boundaries of the SJVAPCD. To show attainment of the standards, the SJVAPCD analyzes the growth projections in the Valley, contributing factors in air pollutant emissions and formations, and existing and adopted emissions controls. The SJVAPCD then formulates a control strategy to reach attainment that includes both State and SJVAPCD regulations and other local programs and measures.

The CEQA Guidelines indicate that a significant impact would occur if the project would conflict with or obstruct implementation of the applicable air quality plan. The GAMAQI indicates that projects that do not exceed SJVAPCD regional criteria pollutant emissions quantitative thresholds would not conflict with or obstruct the applicable AQP.

As shown above in Table 8 and Table 9, the project's construction and operational regional emissions would not exceed SJVAPCD's regional criteria pollutant emissions quantitative thresholds. Therefore, the proposed project would not be considered to obstruct implementation of the applicable air quality plan or be in conflict with the applicable air quality plan.

## b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard?

#### Less Than Significant Impact.

To result in a less than significant impact, emissions of nonattainment pollutants must be below the SJVAPCD's regional significance thresholds. This is an approach recommended by the SJVAPCD's in its GAMAQI. The primary pollutants of concern during project construction and operation are ROG, NO<sub>X</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. The SJVAPCD GAMAQI adopted in 2015 contains thresholds for CO, NO<sub>X</sub>, ROG, SO<sub>X</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>.

Air pollutant emissions have both regional and localized effects. As shown in Table 10 and Table 11, the project's regional emissions would not exceed the applicable regional criteria pollutant emissions quantitative thresholds.

#### c) Expose sensitive receptors to substantial pollutant concentrations?

#### Less Than Significant Impact.

Emissions occurring at or near the project have the potential to create a localized impact that could expose sensitive receptors to substantial pollutant concentrations. The SJVAPCD considers a sensitive receptor to be a location that houses or attracts children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Examples of sensitive receptors include hospitals, residences, convalescent facilities, and schools. The surrounding land uses and closest sensitive receptors for the proposed project are described below.

- North To the north of the project site is a United States Air Force Base, with an airport to the northwest.
- South To the south of the project site are various industrial and commercial uses, followed by residential development.
- East To the east of the project site various industrial and commercial uses, followed by an RV repair shop.
- West To the west of the project site are industrial land uses, followed by commercial land uses (including hotels) further west and northwest and residential development to the southwest.

There is a military base to the north of the project, with a building that may be a barracks approximately 640 feet northeast of the project site. This was assumed to be a residential sensitive receptor in localized air quality analysis presented in this memorandum. The next closest sensitive receptors include apartments located approximately 744 feet southwest of the project site and single-family homes located approximately 772 feet south of the project site. In addition, hotels within approximately 1,000 feet of the project site were also represented as sensitive receptors in the localized air quality analysis presented in this memorandum.

The SJVAPCD's GAMAQI includes screening thresholds for identifying projects that need detailed analysis for localized impacts. Projects with on-site emission increases from construction activities or operational activities that exceed the 100 pounds per day screening level of any criteria pollutant after implementation of all enforceable mitigation measures would require additional analysis to determine if the preparation of an ambient air quality analysis is needed. The criteria pollutants of concern for localized impact in the Air Basin are PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>X</sub>, and CO. There is no localized emission standard for ROG.

As shown in Table 10, the project would not exceed the emission screening thresholds during project construction. Therefore, the project's localized criteria pollutant impacts from construction of the project would be less than significant.

As shown in Table 11, the project would not exceed SJVAPCD screening thresholds for localized criteria pollutant impacts; therefore, the project's localized criteria pollutant impacts from long-term operations would be less than significant.

#### Toxic Air Contaminants

#### Construction

Project construction would involve the use of diesel-fueled vehicles and equipment that emit DPM, which is considered a TAC. The SJVAPCD's current threshold of significance for TAC emissions is an increase in cancer risk for the maximally exposed individual of 20 in a million (formerly 10 in a million). The SJVAPCD's 2015 GAMAQI does not currently recommend analysis of TAC emissions from project construction activities, but instead focuses on projects with operational emissions that would expose sensitive receptors over a typical lifetime of 70 years. In addition, the most intense construction activities of the project's construction would occur during site preparation and grading phases over a short period. Building construction, especially for tilt-up buildings commonly used for new construction of warehouse-style buildings, typically requires limited amounts of diesel equipment relative to site clearing activities.

#### Operations

For reasons previously discussed (see Modeling Parameters and Assumptions), an analysis of TACs (including DPM) was performed using the EPA-approved AERMOD model, which is an air dispersion model accepted by the SJVAPCD for preparing HRAs. AERMOD version 19191 was used for this analysis. Consistent with SJVAPCD guidance, the health risk computation was performed to determine the risk of developing an excess cancer risk calculated on a 70-year exposure scenario. Results of the HRA are summarized in Table 13. The complete HRA prepared for the proposed project, including calculations and AERMOD output data, are included in Attachment B.

Exposure Scenario	Maximum Cancer Risk (Risk per Million)	Chronic Non-Cancer Hazard Index
70-Year Exposure at the DPM MER (from DPM Emissions)	0.3	0.00006
Applicable Threshold of Significance	20	1
Threshold Exceeded?	No	No
Notes: MER = Maximally Exposed Receptor Home Avenue Warehouse Project Operational Total DPM MER UTM: 257324.48, 4072070.86 257324.26, 4072085.47 257324.04, 4072100.08 Three sets of coordinates are listed because the highest concentration was found at all three of these locations. Source: Attachment B		

#### Table 13: Summary of the Health Impacts from Operations of the Proposed Project (70year Scenario)

As shown in Table 13, the project would not exceed the cancer risk, chronic risk, and acute risk threshold levels. The primary source of the emissions responsible for chronic risk are from diesel trucks. DPM does not have an acute risk factor. Since the project does not exceed the applicable SJVAPCD thresholds for cancer risk, acute risk, or chronic risk, the impact related to the project's potential to expose sensitive receptors to substantial pollutant concentrations would be less than significant.

Valley Fever

Valley fever, or coccidioidomycosis, is an infection caused by inhalation of the spores of the fungus, *Coccidioides immitis* (*C. immitis*). The spores live in soil and can live for an extended time in harsh environmental conditions. Activities or conditions that increase the amount of fugitive dust contribute to greater exposure, and they include dust storms, grading, and recreational off-road activities.

The San Joaquin Valley is considered an endemic area for Valley fever. The San Joaquin Valley is considered an endemic area for Valley fever. During 2000–2018, a total of 65,438 coccidioidomycosis cases were reported in California; median statewide annual incidence was 7.9 per 100,000 population and varied by region from 1.1 in Northern and Eastern California to 90.6 in the Southern San Joaquin Valley, with the largest increase (15-fold) occurring in the Northern San Joaquin Valley. Incidence has been consistently high in six counties in the Southern San Joaquin Valley (Fresno, Kern, Kings, Madera, Tulare, and Merced counties) and Central Coast (San Luis Obispo County) regions.<sup>15</sup> California experienced 6,490 new cases of Valley fever in 2020. A total of 466 Valley fever cases were reported in Fresno County in 2020.<sup>16</sup>

The distribution of *C. immitis* within endemic areas is not uniform and growth sites are commonly small (a few tens of meters) and widely scattered. Known sites appear to have some ecological factors in common suggesting that certain physical, chemical, and biological conditions are more favorable for *C. immitis* growth. Avoidance, when possible, of sites favorable for the occurrence of *C. immitis* is a prudent risk management strategy. Listed below are ecologic factors and sites favorable for the occurrence of *C. immitis*:

- 1) Rodent burrows (often a favorable site for *C. immitis*, perhaps because temperatures are more moderate and humidity higher than on the ground surface)
- 2) Old (prehistoric) Indian campsites near fire pits
- 3) Areas with sparse vegetation and alkaline soils
- 4) Areas with high salinity soils
- 5) Areas adjacent to arroyos (where residual moisture may be available)
- 6) Packrat middens
- 7) Upper 30 centimeters of the soil horizon, especially in virgin undisturbed soils
- 8) Sandy, well-aerated soil with relatively high water-holding capacities

Sites within endemic areas less favorable for the occurrence of *C. immitis* include:

- 1) Cultivated fields
- 2) Heavily vegetated areas (e.g., grassy lawns)
- 3) Higher elevations (above 7,000 feet)
- 4) Areas where commercial fertilizers (e.g., ammonium sulfate) have been applied
- 5) Areas that are continually wet

<sup>&</sup>lt;sup>15</sup> Centers for Disease Control and Prevention (CDC). 2020. Regional Analysis of Coccidioidomycosis Incidence—California, 2000–2018. Website: https://www.cdc.gov/mmwr/volumes/69/wr /mm6948a4.htm?s\_cid=mm6948a4\_e. Accessed March 17, 2021.

<sup>&</sup>lt;sup>16</sup> California Department of Public Health (CDPH). 2021. Coccidioidomycosis in California Provisional Monthly Report January 2021. Website: https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/CocciinCA ProvisionalMonthlyReport.pdf. Accessed October 5, 2021.

- 6) Paved (asphalt or concrete) or oiled areas
- 7) Soils containing abundant microorganisms
- 8) Heavily urbanized areas where there is little undisturbed virgin soil.<sup>17</sup>

The project is situated on a site previously disturbed that does not provide a suitable habitat for spores. Specifically, the project site has been previously disturbed and is occupied by vegetation in the form of grass and shrubbery. Therefore, implementation of the proposed project would have a low probability of the site having *C. immitis* growth sites and exposure to the spores from disturbed soil.

Although conditions are not favorable, construction activities could generate fugitive dust that contain *C*. *immitis* spores. The project will minimize the generation of fugitive dust during construction activities by complying with SJVAPCD's Regulation VIII. Therefore, this regulation, combined with the relatively low probability of the presence of *C. immitis* spores would reduce Valley fever impacts to less than significant.

During operations, dust emissions are anticipated to be relatively small, because most of the project area would be occupied by the proposed warehouse building and pavement. This condition would lessen the possibility of the project from providing habitat suitable for *C. immitis* spores and for generating fugitive dust that may contribute to Valley fever exposure. Impacts would be less than significant.

#### Naturally Occurring Asbestos

Review of the map of areas where naturally occurring asbestos in California are likely to occur found no such areas in the project area. Therefore, development of the project is not anticipated to expose receptors to naturally occurring asbestos.<sup>18</sup> Impacts would be less than significant.

#### Impact Analysis Summary

In summary, the project would not exceed SJVAPCD localized emission daily screening levels for any criteria pollutant. The project is not a significant source of TAC emissions during construction or operation. The project is not in an area with suitable habitat for Valley fever spores and is not in area known to have naturally occurring asbestos. Therefore, the project would not result in significant impacts to sensitive receptors.

# d) Result in other emissions (such as those leading to odors or) adversely affecting a substantial number of people?

#### Less Than Significant Impact.

Two situations create a potential for odor impact. The first occurs when a new odor source is located near an existing sensitive receptor. The second occurs when a new sensitive receptor locates near an existing source of odor. The proposed project is of the first type only since it involves a potential new odor source and would not locate any new sensitive receptors.

Odor impacts on residential areas and other sensitive receptors, such as hospitals, day-care centers, schools, etc. warrant the closest scrutiny, but consideration should also be given to other land uses where people may congregate, such as recreational facilities, worksites, and commercial areas.

<sup>&</sup>lt;sup>17</sup> United States Geological Survey (USGS). 2000. Operational Guidelines (Version 1.0) for Geological Fieldwork in Areas Endemic for Coccidioidomycosis (Valley Fever), 2000, Open-File Report 2000-348. Website: https://pubs.usgs.gov/of/2000/0348/pdf/of00-348.pdf. Accessed November 8, 2021.

 <sup>&</sup>lt;sup>18</sup> U.S. Geological Survey. 2011. Van Gosen, B.S., and Clinkenbeard, J.P. California Geological Survey Map Sheet 59. Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California. Open-File Report 2011-1188 Website: https://pubs.usgs.gov/of/2011/1188/. Accessed November 29, 2021.

Although the project is less than one mile from the nearest sensitive receptor, the project is not expected to be a significant source of odors. The screening levels for these land use types are shown in Table 14.

Odor Generator	Screening Distance	
Wastewater Treatment Facilities	2 miles	
Sanitary Landfill	1 mile	
Transfer Station	1 mile	
Composting Facility	1 mile	
Petroleum Refinery	2 miles	
Asphalt Batch Plant	1 mile	
Chemical Manufacturing	1 mile	
Fiberglass Manufacturing	1 mile	
Painting/Coating Operations (e.g., auto body shop)	1 mile	
Food Processing Facility	1 mile	
Feed Lot/Dairy	1 mile	
Rendering Plant	1 mile	
Wastewater Treatment Facilities	2 miles	
Source of Thresholds: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed September 20. 2021.		

#### **Table 14: Screening Levels for Potential Odor Sources**

#### Construction

During construction, various diesel-powered vehicles and equipment in use on-site would create localized odors. These odors would be temporary and intermittent, which would decrease the likelihood of the odors concentrating in a single area or lingering for any notable period of time. As such, these odors would likely not be noticeable for extended periods of time beyond the project's site boundaries. The potential for odor impacts from construction of the proposed project would, therefore, be less than significant.

#### Operations

The development of the proposed project would not substantially increase objectionable odors in the area and would not introduce any new sensitive receptors to the area that could be affected by any existing objectionable odor sources in the area. Land uses that are typically identified as sources of objectionable odors include landfills, transfer stations, sewage treatment plants, wastewater pump stations, composting facilities, asphalt batch plants, rendering plants, and other land uses outlined in Table 14. The proposed project would not engage in any of these activities. Minor sources of odors that would be associated with typical warehouse and light industrial uses, such as exhaust from mobile sources, are known to have temporary and less concentrated odors. Considering the low intensity of potential odor emissions, the proposed project's operational activities would not expose receptors to objectionable odor emissions. Therefore, the proposed project would not be considered to be a generator of objectionable odors during operations. As such, impacts would be less than significant.

#### Greenhouse Gas Emissions Estimation Summary and Greenhouse Gas Impact Analysis

#### Thresholds of Significance

#### San Joaquin Valley Air Pollution Control District

The SJVAPCD's Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA presents a tiered approach to analyzing project significance with respect to GHG emissions. Project GHG emissions are considered less than significant if they can meet any of the following conditions, evaluated in the order presented:

- Project is exempt from CEQA requirements;
- Project complies with an approved GHG emission reduction plan or GHG mitigation program;
- Project implements Best Performance Standards (BPS); or
- Project demonstrates that specific GHG emissions would be reduced or mitigated by at least 29 percent compared to Business-as-Usual (BAU), including GHG emission reductions achieved since the 2002-2004 baseline period.

#### Project-level Thresholds

Section 15064.4(b) of the CEQA Guidelines' amendments for GHG emissions states that a lead agency may take into account the following three considerations in assessing the significance of impacts from GHG emissions.

- Consideration #1: The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting.
- Consideration #2: Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- Consideration #3: The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of GHG emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an Environmental Impact Report (EIR) must be prepared for the project.

The SJVAPCD's Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA includes thresholds based on whether the project will reduce or mitigate GHG levels by 29 percent from BAU levels compared with 2005 levels by 2020.<sup>19</sup> This level of GHG reduction is based on the target established by CARB's AB 32 Scoping Plan, approved in 2008. First occupancy at the project site is expected to occur in 2023. This date is past the AB 32 2020 milestone year. Given recent legislative and legal scrutiny on post-2020 compliance, additional discussion is provided to show progress towards GHG reduction goals identified in CARB's 2017 Scoping Plan for the year 2030. Additionally, although not included in a formal GHG reduction plan, Executive Order S-3-05 also includes a goal of reducing GHG emissions 80 percent below 1990 levels by 2050 and Executive Order B-55-18

<sup>&</sup>lt;sup>19</sup> San Joaquin Valley Air Pollution Control District (SJVAPCD). 2009. "Final Staff Report, Addressing Greenhouse Gas Emissions Impacts under the California Environmental Quality Act." Website: http://www.valleyair.org/programs/CCAP/11-05-09/1\_CCAP\_FINAL\_CEQA\_GHG\_Draft\_Staff\_Report\_Nov\_05\_2009.pdf. December 2009. Accessed October 30, 2021.

set the goal to achieve carbon neutrality statewide by 2045. The proposed project briefly addresses those two Executive Orders.

#### Newhall Ranch

The California Supreme Court decision in the *Center for Biological Diversity et al. vs. California Department of Fish and Wildlife, the Newhall Land and Farming Company* (62 Cal.4th 204 [2015], and known as the Newhall Ranch decision), confirmed that the use of BAU analysis (e.g., 29 percent below BAU), a performance-based approach, would be satisfactory. However, for a project-level analysis that uses CARB's statewide BAU targets, substantial evidence must be presented to support the use of those targets for a particular project at a specific location. The court noted that this may require examination of the data behind the statewide model and adjustment to the levels of reduction from BAU used for project evaluation. To date, neither CARB nor any lead agencies have provided any guidance on how to adjust AB 32's statewide BAU target for use at the project level.

The regulations in the State's 2008 Scoping Plan have been adopted and the State is on track to meet the 2020 target and achieve continued progress towards meeting the 2017 Scoping Plan target for 2030.

In the Newhall case, the Supreme Court was concerned that new development may need to reduce GHG emissions more than existing development to demonstrate it is meeting its fair share of reductions. New development does do more than its fair share through compliance with enhanced regulations, particularly with respect to motor vehicles, energy efficiency, and electricity generation. If no additional reductions are required from an individual project beyond that achieved by regulations, then the amount needed to reach the 2020 target is the amount of GHG emissions a project must reduce to comply with Statewide goals.

#### Addressing Greenhouse Gas CEQA Impact Questions

#### Table 15: Summary of Greenhouse Gas Impact Analysis

Greenhouse Gas Emissions	
Would the project:	Significance Finding
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less than Significant Impact
b) Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less than Significant Impact

# a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

To determine significance, the analysis first quantifies project-related GHG emissions under a businessas-usual scenario, and then compare these emissions with those emissions that would occur when all project-related design features are accounted for, and when compliance with applicable regulatory measures is assumed. The standards and methodology are explained in further detail, below.

#### Construction

GHG emissions generated during all phases of construction were combined and are shown in Table 16. The SJVAPCD does not have a recommendation for assessing the significance of construction related emissions, however, other jurisdictions such as the Sacramento Metropolitan Air Quality Management District (SMAQMD) have concluded that construction emissions should be included since they may remain in the atmosphere for years after construction is complete. The SMAQMD has established quantitative significance thresholds of 1,100 MT CO<sub>2</sub>e per year for the construction phases of land use projects. As such, annual construction emissions below the 1,100 MT CO<sub>2</sub>e would have a less than significant cumulative impact on GHGs.

Emissions Source	MT CO <sub>2e</sub> per Year	
Site Preparation	19	
Grading	100	
Building Construction	509	
Paving	22	
Architectural Coating	6	
Project Construction Total	657	
Significance Threshold	1,100	
Threshold Exceeded?	No	
Notes:		
MT CO <sub>2</sub> e = metric tons of carbon dioxide equivalent		
Totals summed using unrounded numbers; totals may not appear to sum exactly due to rounding.		
Source: CalEEMod Output and Additional Supporting Information (Attachment A).		

#### Table 16: Summary of Construction-Generated Greenhouse Gas Emissions

#### **Operations**

Operational or long-term emissions occur over the life of the project. Sources of emissions may include motor vehicles and trucks, energy usage, water usage, waste generation, and area sources, such as

landscaping activities and residential woodburning. Operational GHG emissions associated with the proposed project were estimated using CalEEMod 2020.4.0. Please see the "Assumptions" sections of this technical report for details regarding assumptions and methodology used to estimate emissions. Complete CalEEMod output files and additional supporting information are also included in Attachment A.

#### Business-as-Usual Operational Emissions

Operational emissions under the business-as-usual scenario were modeled using CalEEMod 2020.4.0. Modeling assumptions for the year 2005 were used to represent 2020 business as usual conditions (without the benefit of regulations adopted to reduce GHG emissions). The CARB and SJVAPCD guidance recommend using regulatory conditions in 2002-2004 in the baseline scenario to represent conditions as if regulations had not been adopted to allow the effect of projected growth on achieving reduction targets to be clearly defined. CalEEMod defaults were used for project energy usage, water usage, waste generation, and area sources (architectural coating, consumer products, and landscaping). The vehicle fleet mixes were revised to reflect the project fleet mix identified for the buildout year.

#### Buildout Year Operational Emissions

Operational emissions for the year 2023 were modeled using CalEEMod. CalEEMod assumes compliance with some, but not all, applicable rules and regulations regarding energy efficiency, vehicle fuel efficiency, renewable energy usage, and other GHG reduction policies, as described in the CalEEMod User's Guide.<sup>20</sup>

The reductions obtained from each regulation and the source of the reduction amount used in the analysis are described below.

The following regulations are incorporated into the CalEEMod emission factors:

- Pavley I and Pavley II (LEV III) motor vehicle emission standards
- CARB Medium and Heavy-Duty Vehicle Regulation
- 2005, 2008, 2013, 2016, and 2019 Title 24 Energy Efficiency Standards

The following regulations have not been incorporated into the CalEEMod emission factors and require alternative methods to account for emission reductions provided by the regulations:

- Renewables Portfolio Standard (RPS) requirements for year 2030
- Green Building Code Standards (indoor water use)
- California Model Water Efficient Landscape Ordinance (outdoor water)
- CalRecycle 75 Percent Initiative (solid waste)

Title 24 reductions for 2013 and 2016 updates were added to CalEEMod 2016.3.2 and were carried into CalEEMod 2020.4.0. Title 24 reductions for 2019 were added to CalEEMod 2020.4.0.

RPS is not accounted for in CalEEMod 2020.4.0. Reductions from RPS for operational years 2030 and beyond are addressed by revising the electricity emission intensity factor in CalEEMod to account for the utility RPS rate forecast for 2030. The utilities will be required by SB 100 to increase the use of renewable energy sources to 60 percent by 2030. The latest power content label for PG&E was used to estimate a revised CO<sub>2</sub> intensity factor for use in the modeling.

<sup>&</sup>lt;sup>20</sup> California Air Pollution Control Officers Association (CAPCOA). 2021. California Emission Estimator Model (CalEEMod) Version 2020.4.0 User's Guide. Website: https://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/01\_user-39-sguide2020-4-0.pdf?sfvrsn=6. Accessed November 30, 2021.

Reductions in emissions from solid waste are based on the County achieving the CalRecycle 75 Percent Initiative by 2020 compared with a 50 percent baseline for 2005.<sup>21</sup> Reductions are taken using the CalEEMod mitigation component.

Energy savings from water conservation resulting from the Green Building Code Standards for indoor water use and California Model Water Efficient Landscape Ordinance for outdoor water use are not included in CalEEMod. The Water Conservation Act of 2009 mandates a 20 percent reduction in urban water use that is implemented with these regulations.<sup>22</sup> Benefits of the water conservation regulations are applied in the CalEEMod mitigation component.

GHG reductions from some design features and compliance with regulations that are not otherwise accounted for can be quantified in CalEEMod. Note that CalEEMod nominally treats these design elements and conditions as "mitigation measures," despite their inclusion in the project description. Therefore, reported operational emissions are considered to represent unmitigated project conditions.

Operational GHG emissions by source are shown in Table 17. Full buildout of the project is anticipated to occur in 2023.

	Emissions (M	T CO₂e per year)	
Emission Source	Business as Usual Total Emissions (MT CO₂e per year)	Buildout Year (2023) Total Emissions with Regulations and Design Features (MT CO <sub>2</sub> e per year)	
Area	0.01	0.01	
Energy	740	317	
Mobile (Passenger Vehicles)	257	181	
Mobile (Trucks)	3,211	2,456	
Yard Tractor	108	108	
Waste	80	60	
Water	117	59	
Total	4,513	3,182	
Percent Reduction	29.5%		
City of Fresno GHG Reduction Plan Significance Threshold		21.7%	
SJVAPCD Recommended Significance Threshold		29%	
Exceeds Either Significance Threshold?		No	
$MT CO_2e = metric tons of carbon dioxide equivalent.$	ev pet appear to sum evently a	lue to rounding	

Fable 17: Unmitigated Project O	<b>Operational GHG Emissions</b>	(Buildout Year Scenario)
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Totals were calculated using unrounded emissions; totals may not appear to sum exactly due to rounding. The project achieves the SJVAPCD 29 percent reduction from BAU threshold, and the 21.7 percent required to show consistency with AB 32 targets.

<sup>&</sup>lt;sup>21</sup> California Department of Resources Recycling and Recovery (CalRecycle). 2016b. California's 75 Percent Initiative: Defining the Future. Website: https://www.calrecycle.ca.gov/75percent#:~:text=The%20Legislature%

 <sup>20</sup>and%20Governor%20Brown,decreasing%20California's%20reliance%20on%20landfills. Accessed November 2, 2021.
 <sup>22</sup> California Department of Water Resources (CDWR). 2013. California Water Plan Update 2013, Chapter 3 Urban Water Use Efficiency.

	Emissions (MT CO₂e per year)	
Emission Source	Business as Usual Total Emissions (MT CO₂e per year)	Buildout Year (2023) Total Emissions with Regulations and Design Features (MT CO2e per year)
Source of SJVAPCD Significance Threshold: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Final Draft Guidance for Assessing and Mitigating Air Quality Impacts. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed November 30, 2021.		
Source of Business as Usual Emissions: CalEEMod output for year 2005 (see Attachment A).		
Source of Buildout Year Emissions: CalEEMod output for th	e year 2023 (Attachment A).	

As shown in Table 17, the proposed project's total GHG annual emissions would not exceed applicable thresholds of significance in the project buildout (2023).

Emissions were assessed for full buildout operations in years 2023 and 2030. The 2030 scenario summarized in Table 18 was prepared to assess the project's consistency with the SB 32 2030 target.

	Emissions (MT CO <sub>2</sub> e per year)	
Emission Source	Business as Usual Total Emissions (MT CO₂e per year)	2030 Year Total Emissions with Regulations and Design Features (MT CO2e per year)
Area	0.01	0.01
Energy	740	302
Mobile (Passenger Vehicles)	257	144
Mobile (Trucks)	3,211	2,095
Yard Tractor	108	108
Waste	80	60
Water	117	57
Total	4,513	2,768
Percent Reduction		38.7%
City of Fresno GHG Reduction Plan Significance Threshold		21.7%
Significance Threshold		29%
Exceeds Either Significance Threshold?		No
MT CO <sub>2</sub> e = metric tons of carbon dioxide equivalent. Totals were calculated using unrounded emissions; totals may not appear to sum exactly due to rounding. Source of Business-as-Usual Emissions: CalEEMod output for year 2005 (see Attachment A). Source of 2030 Emissions: CalEEMod output for the year 2030 (Attachment A).		

 Table 18: Unmitigated Project Operational GHG Emissions (Year 2030 Scenario)

As shown in Table 17 and Table 18, the project would achieve a 29.5 percent reduction from BAU at project buildout (2023) and 38.7 percent reduction from BAU by the year 2030 with adopted regulations and design features incorporated. This is above the 29 percent reduction required by the SJVAPCD threshold, and the required 21.7 percent average reduction from all GHG emission sources to meet the

AB 32 targets. The CARB originally identified a reduction of 29 percent from business as usual as needed to achieve AB 32 targets. The 2008 recession and slower growth in the years since 2008 have reduced the growth forecasted for 2020 and the amount needed to be reduced to achieve 1990 levels as required by AB 32; the target was revised to 21.7 percent.

The 29.5 percent reduction from BAU is 7.8 percent beyond the average reduction required by the State from all sources to achieve the AB 32 2020 target. This surplus addresses the Supreme Court's concern in the Newhall case that new development must do more than average to meet its fair share of emission reductions.

By 2030, the proposed project would achieve a 38.7 percent reduction from BAU or 17.0 percent above the 21.7 percent reduction necessary to meet the 2020 target. No new threshold has been adopted by the City of Fresno for the 2030 target, so in the interim the project must make continued progress toward the 2030 goal.

The project's occupancy is anticipated to be fully built out in 2023, thus an additional analysis is provided to show consistency with post-2020 State legislative GHG goals. The SB 32 goal of 40 percent below 1990 emission levels by 2030 is the target established by the 2017 Scoping Plan Update.

The 2017 Scoping Plan includes new strategies that are not incorporated in the analysis above. Many measures that are likely to proceed include zero net energy buildings in future updates to Title 24 and enhanced motor vehicle fuel efficiency standards beyond 2025. The 2017 Scoping Plan identified an emission limit of 260 million metric tons of carbon dioxide equivalents (MMTCO<sub>2</sub>e). The 2030 BAU Inventory is estimated to be 392 MMTCO<sub>2</sub>e. The 2017 Scoping Plan identified that the bulk of its reductions would come from the Electric Power, Industrial fuel combustion, and Transportation. The continuance of the Cap and Trade would provide additional reductions. Although the 2017 Scoping Plan largely relies on state actions to achieve the GHG emissions limit, the CARB considers local governments partners in achieving the State's goals for reducing GHG emissions. The 2017 Scoping Plan suggests that all new land use development implement feasible measures to reduce GHG emissions, however, it does not define feasible measures nor assign a required reduction amount to new development. A fair share quantitative threshold based on the 2017 Scoping Plan is not presently feasible as the nexus between a project's contribution and its fair share mitigation is not well defined.

Based on the 29.5 percent reduction from BAU for the buildout year (2023), the proposed project would not have a significant impact on GHG emissions as it would meet the SJVAPCD's threshold of 29 percent and exceed the CARB's 21.7 percent reduction necessary from all sources to meet the AB 32 emissions limit.

For the year 2030, the project achieves a 38.7 percent reduction from BAU, which demonstrates substantial progress towards achieving the 2030 target.

Regarding the years 2045 and 2050, there have been Executive Orders issued to address carbon neutrality and GHG reduction targets, respectively for those years, however, there are no existing GHG reduction measures or plans that specifically address those Orders. Historically, the State would take the lead in developing regulatory and market measures to achieve the required reductions. The proposed project would participate in the reductions through adherence with regulations and continued improvements to the motor vehicle efficiencies accessing the project site. Studies have shown that in order to meet the 2050 targets, aggressive pursuit of technologies in the transportation and energy sectors, including electrification and the decarbonization of fuel, will be required. Because of the technological shifts required and the unknown parameters of the regulatory framework in 2050, quantitatively analyzing the proposed project's impacts further relative to the 2050 goals is speculative for purposes of CEQA.

#### Conclusion

In summary, the proposed project meets the required 29 percent below BAU guidance provided by the SJVAPCD the 21.7 percent below BAU recommended in the City of Fresno GHG Reduction Plan. Furthermore, the proposed project shows significant reductions in the year 2030, demonstrating that it would not inhibit the State's progress in achieving the 2030 GHG emissions target. The GHG emissions impact would be less than significant with respect to Consideration #1 and #2.

# b) Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

#### Less Than Significant Impact.

The following analysis assesses the proposed project's compliance with Consideration No. 3 regarding consistency with adopted plans to reduce GHG emissions. The City of Fresno adopted its GHG Reduction Plan as part of the General Plan Update in 2014. The proposed project's consistency with applicable GHG policies from the GHG Reduction Plan policies is assessed below. The proposed project is also assessed for its consistency with CARB's adopted Scoping Plans.

#### Consistency with City of Fresno's Adopted Greenhouse Gas Reduction Plan

The Fresno General Plan includes a GHG Plan that provides the City's primary strategy for reducing GHG emissions.<sup>23</sup> The intent of the GHG Plan is to achieve compliance with state GHG reduction mandates by focusing on feasible actions the City can take to minimize the adverse impacts of growth and development on climate change. The GHG Plan does not reinvent the wheel; rather, it builds on the General Plan policies and implementation measures. Where needed, the GHG Plan provides more details to clarify and focus action and to ensure implementation.

As evaluated in Impact GHG-1, the proposed project would not conflict with the GHG reduction goals identified in the City of Fresno's adopted GHG Reduction Plan based on the project's achievement of reductions from BAU. Furthermore, compliance with Title 24 standards would ensure that the proposed project would not conflict with any of the General Plan energy conservation policies related to the proposed project's building envelope, mechanical systems, and indoor and outdoor lighting. Relevant policies aimed to reduce emissions of GHGs are listed under the "Local Setting" section of this memorandum. Several of the relevant policies are voluntary or cannot be implemented by an individual development project. However, compliance with regulations enforced by the City of Fresno would ensure the project would not conflict with the City's efforts to reduce community-generated GHG emissions.

#### Consistency with CARB's Adopted Scoping Plans

The State's regulatory program implementing the 2008 Scoping Plan is now fully mature. All regulations envisioned in the Scoping Plan have been adopted, and the effectiveness of those regulations has been estimated by the agencies during the adoption process and then tracked to verify their effectiveness after implementation. The combined effect of this successful effort is that the State now projects that it will meet the 2020 target and achieve continued progress toward meeting post-2020 targets. Governor Brown, in the introduction to Executive Order B-30-15, stated "California is on track to meet or exceed the current target of reducing greenhouse gas emissions to 1990 levels by 2020, as established in the California Global Warming Solutions Act of 2006 (AB 32)."

The State's regulatory program is able to target both new and existing development because the two most important strategies, motor vehicle fuel efficiency and emissions from electricity generation, obtain reductions equally from existing sources and new sources. This is because all vehicle operators use cleaner

<sup>&</sup>lt;sup>23</sup> City of Fresno. 2014. City of Fresno General Plan. December. Website: https://www.fresno.gov/darm/general-plandevelopment-code/. Accessed October 30, 2021.

low carbon fuels and buy vehicles subject to the fuel efficiency regulations and all building owners or operators purchase cleaner energy from the grid that is produced by increasing percentages of renewable fuels. This includes regulations on mobile sources such as the Pavley standards that apply to all vehicles purchased in California, the LCFS (Low Carbon Fuel Standard) that applies to all fuel sold in California, and the Renewable Portfolio Standard and Renewable Energy Standard under SB 100 that apply to utilities providing electricity to all California end users.

Moreover, the Scoping Plan strategy will achieve more than average reductions from energy and mobile source sectors that are the primary sources related to development projects and lower than average reductions from other sources such as agriculture. The proposed project's operational GHG emissions would principally be generated from electricity consumption and vehicle use, which are directly under the purview of the Scoping Plan strategy and have experienced reductions above the State average reduction. Considering this information, the proposed project's GHG impacts would be less than significant.

#### Consistency Regarding GHG Reduction Goals for 2050 under Executive Order S-3-05

Regarding goals for 2050 under Executive Order S-3-05, at this time it is not possible to quantify the emissions savings from future regulatory measures, as they have not yet been developed; nevertheless, it can be anticipated that operation of the proposed project would comply with whatever measures are enacted that State lawmakers decide would lead to an 80 percent reduction below 1990 levels by 2050. In its 2008 Scoping Plan, CARB acknowledged that the "measures needed to meet the 2050 are too far in the future to define in detail." In the First Scoping Plan Update; however, CARB generally described the type of activities required to achieve the 2050 target: "energy demand reduction through efficiency and activity changes; large scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and rapid market penetration of efficiency and clean energy technologies that requires significant efforts to deploy and scale markets for the cleanest technologies immediately." The 2017 Scoping Plan provides an intermediate target that is intended to achieve reasonable progress toward the 2050 target.

Accordingly, taking into account the proposed project's design features and the progress being made by the State towards reducing emissions in key sectors such as transportation, industry, and electricity, the proposed project would be consistent with State GHG Plans and would further the State's goals of reducing GHG emissions 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050, and does not obstruct their attainment.

### Energy

#### **Environmental Setting**

Pacific Gas and Electric Company provides electricity and natural gas service to the City. Upon buildout of the project site, electricity to the project site would be provided by PG&E. All electricity infrastructure would be located underground and would tie-in to existing infrastructure.

Based on PG&E's 2019 power content label, approximately 28.5 percent of PG&E's electricity for its base plan came from eligible renewable resources including solar, wind, geothermal, biomass, and small hydroelectric sources. Additionally, a larger percent of PG&E's total electric power mix was from GHG-free sources including nuclear, large hydroelectric, and eligible renewable sources of energy.<sup>24</sup> In 2020, approximately 85 percent of the electricity PG&E supplied was GHG free. PG&E reports that more than 35 percent of delivered electricity came from RPS-eligible sources in 2020, while PGE's 2020 power content label reports 30.6 percent of PG&E's retail sales were from eligible renewable sources.<sup>25</sup>

#### Methodology

The energy requirements for the proposed project were determined using the construction and operational estimates generated from the Air Quality Analysis (refer to Attachment A for related CalEEMod output files). The calculation worksheets for diesel fuel consumption rates for off-road construction equipment and on-road vehicles are provided in Attachment C. Short-term construction energy consumption is discussed below.

#### Short-Term Construction

#### **Off-Road Equipment**

The proposed project is anticipated to begin construction in 2022. For modeling purposes, construction was assumed to be completed in a one-year period. Based on applicant-provided information, it is anticipated that the warehouse building would be constructed using tilt-up methods. Table 19 provides estimates of the project's construction fuel consumption from off-road construction equipment for the entire project, categorized by construction activity.

Project Component	Construction Activity	Fuel Consumption (gallons)
Home Avenue Warehouse	Site Preparation	703
Project (On-site, Off-road	Grading	3,874
Equipment Use)	Building Construction	11,114
	Paving	843
	Architectural Coating	124
Total		16,658
Note: Totals may not appear to su	m correctly due to rounding	
Source: Energy Consumption Cal	culations (Attachment C).	

As shown in Table 19, use of off-road equipment associated with construction of the proposed project is estimated to consume approximately 16,658 gallons of diesel fuel over the entire construction duration. There are no unusual project characteristics that would necessitate the use of construction equipment

<sup>&</sup>lt;sup>24</sup> Pacific Gas & Electric (PG&E). 2020. 2019 Power Content Label. Website:

https://www.energy.ca.gov/filebrowser/download/3245. Accessed October 11, 2021.

<sup>&</sup>lt;sup>25</sup> Pacific Gas & Electric (PG&E). 2021. Corporate Sustainability Report 2021. Website: https://www.bgecorp.com/corp.rosponsibility/roports/2021/nf04\_ropow/abla\_opergy.html\_Accessed

https://www.pgecorp.com/corp\_responsibility/reports/2021/pf04\_renewable\_energy.html. Accessed October 13, 2021.

that would be less energy efficient than at comparable construction sites in the Fresno County region or other parts of California. Therefore, it is expected that construction fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region.

#### **On-Road Vehicles**

On-road vehicles for construction workers, vendors, and haulers would require fuel for travel to and from the site during construction. Table 20 provides an estimate of the total on-road vehicle fuel usage during construction. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in other parts of the state. Therefore, it is expected that construction fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region.

Project Component	Total Annual Fuel Consumption (gallons)
Site Preparation	205
Grading	1,809
Building Construction	27,464
Paving	224
Architectural Coating	376
Total	30,078
Note: Totals may not appear to sum correctly due to rounding	g
Source: Energy Consumption Calculations (Attachment C).	

#### Table 20: Construction On-Road Fuel Consumption

#### Other Energy Consumption Anticipated During Project Construction

Other equipment could include construction lighting, field services (office trailers), and electrically driven equipment such as pumps and other tools. Section 10-109 of the Fresno Municipal Code defines permissible hours of construction as between the hours of 7:00 a.m. and 10:00 p.m. Monday through Saturday.<sup>26</sup> As on-site construction activities would be restricted to these hours; it is anticipated that the use of construction lighting would be minimal. Singlewide mobile office trailers, which are commonly used in construction staging areas, generally range in size from 160 square feet to 720 square feet. A typical 720-square-foot office trailer would consume approximately 6,295 kWh during the approximate 12-month construction phase (Attachment C).

#### Long-Term Operations

#### Transportation Energy Demand

Table 21 provides an estimate of the daily and annual fuel consumed by vehicles traveling to and from the proposed project. These estimates were derived using the same assumptions used in the operational air quality analysis for the proposed project.

<sup>&</sup>lt;sup>26</sup> City of Fresno. 2020. Fresno Municipal Code, Section 10-105. Website:

https://library.municode.com/ca/fresno/codes/code\_of\_ordinances?nodeId=MUCOFR\_CH10REREPUNUREPRCOUS\_ART1 NORE\_S10-109EX. Accessed October 20, 2021.

Vehicle Type	Percent of Vehicle Trips	Daily VMT	Annual VMT	Average Fuel Economy (miles/ gallon)	Total Daily Fuel Consumpti on (gallons)	Total Annual Fuel Consumpti on (gallons)				
Passenger Vehicles	68.24%	1,616	589,741	28.78	57.49	20,983				
Heavy-Heavy Trucks (HHDT)	31.76%	4,687	1,710,800	7.03	666.80	243,400				
Total	100%	6,303	2,300,541	_	724	264,383				
Iotal     Iot%     6,303     2,300,541     —     724     264,383       Notes:     Percent of Vehicle Trips and VMT provided by CalEEMod.     VMT = vehicle miles traveled       Source: Energy Consumption Calculations (Attachment C)										

#### Table 21: Long-Term Operational Vehicle Fuel Consumption

As shown above, daily vehicular fuel consumption is estimated to be 724 gallons of gasoline and diesel fuel combined. Annual consumption is estimated at 264,383 gallons.

#### **Building Energy Demand**

As shown in Table 22 and Table 23, the proposed project is estimated to demand 1,644,226 kilowatthours (KWhr) of electricity and 3,044,700 1,000-British Thermal Units (KBTU) of natural gas, respectively, on an annual basis.

#### Table 22: Long-Term Electricity Usage

Land Use	Total Electricity Demand (KWhr/year)
Unrefrigerated Warehouse-No Rail	1,577,600
Parking Lot	66,626
Landscaping	0
Other Non-Asphalt Surfaces	0
Total	1,644,226
Source: Energy Consumption Calculations (Attachm	ent C).

#### Table 23: Long-Term Natural Gas Usage

Land Use	Total Natural Gas Demand (KBTU/year)
Unrefrigerated Warehouse-No Rail	3,044,700
Parking Lot	0
Landscaping	0
Other Non-Asphalt Surfaces	0
Total	3,044,700

Source: Energy Consumption Calculations (Attachment C).

#### Addressing Energy CEQA Impact Questions

This section discusses potential energy impacts associated with the proposed project and provides mitigation measures where necessary.

#### Table 24: Summary of Energy Impact Analysis

Energy	
Would the project:	Significance Finding
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Less than Significant Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	Less than Significant Impact

# a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

#### Less Than Significant Impact.

This impact addresses the energy consumption from both the short-term construction and long-term operations are discussed separately below.

#### Construction Energy Demand

As summarized in Table 19 and Table 20, the proposed project would require 16,658 gallons of diesel fuel for construction off-road equipment and 30,078 gallons of gasoline and diesel for on-road vehicles during construction. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or other parts of the state. In addition, the overall construction schedule and process is already designed to be efficient in order to avoid excess monetary costs. For example, equipment and fuel are not typically used wastefully due to the added expense associated with renting the equipment, maintaining it, and fueling it. Therefore, it is expected that construction fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region, and as such, impacts would be less than significant.

#### Long-Term Energy Demand

#### **Building Energy Demand**

Buildings and infrastructure constructed pursuant to the proposed project would comply with the versions of CCR Titles 20 and 24, including California Green Building Standards (CALGreen), that are applicable at the time that building permits are issued. The proposed project is estimated to demand 1,644,226 KWhr of electricity per year and 3,044,700 KBTU of natural gas per year. This would represent an increase in demand for electricity and natural gas.

It would be expected that building energy consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than for any other similar buildings in the region. Current state regulatory requirements for new building construction contained in the 2019 CALGreen and Title 24 standards would increase energy efficiency and reduce energy demand in comparison to existing commercial structures, and therefore would reduce actual environmental effects associated with energy use from the proposed project. Additionally, the CALGreen and Title 24 standards have increased efficiency standards through each update.

Therefore, while the proposed project would result in increased electricity and natural gas demand, the electricity and natural gas would be consumed more efficiently and would be typical of existing industrial development.

Based on the above information, the proposed project would not result in the inefficient or wasteful consumption of electricity or natural gas, and impacts would be less than significant.

#### Transportation Energy Demands

The daily vehicular fuel consumption is estimated to be 724 gallons of both gasoline and diesel fuel. Annual consumption is estimated at 264,383 gallons. In addition, the proposed project would constitute development within an established community and would not be opening a new geographical area for development. As such, the proposed project would not result in unusually long trip lengths for future employees, vendors, or visitors. The property is located at 5255 E. Home Ave, Fresno, CA 93727 -APN: 455-201-24, APN: 455-201-38 and is zoned as IL-Light Industrial with similar planned use. The proposed project would be well-positioned to accommodate an existing community. Vehicles accessing the site would be typical of vehicles accessing similar warehouse-type uses in the City of Fresno and surrounding areas. For these reasons, it would be expected that vehicular fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than for any other similar land use activities in the region, and impacts would be less than significant.

#### b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

#### Less Than Significant Impact.

The Fresno General Plan contains the following implementing policies related to energy conservation that are relevant to the proposed project.<sup>27</sup>

- **RC-5-b Greenhouse Gas Reduction Plan.** As is consistent with State law, prepare and adopt a Greenhouse Gas Reduction Plan as part of the Master Environmental Impact Report to be concurrently approved with the Fresno General Plan in order to achieve compliance with State mandates, assist development by streamlining the approval process, and focus on feasible actions the City can take to minimize the adverse impacts of growth and development on global climate change. The Greenhouse Gas Reduction Plan shall include, but not be limited to:
  - A baseline inventory of all known or reasonably discoverable sources of GHGs that currently exist in the city and sources that existed in 1990.
  - A projected inventory of the GHGs that can reasonably be expected to be emitted from those sources in the year 2035 with implementation of this General Plan and foreseeable communitywide and municipal operations.
  - A target for the reduction of emissions from those identified sources.

<sup>&</sup>lt;sup>27</sup> City of Fresno. 2014. City of Fresno General Plan. December. Website: https://www.fresno.gov/darm/general-plandevelopment-code/. Accessed November 23, 2021.

- A list of feasible GHG reduction measures to meet the reduction target, including energy conservation and "green building" requirements in municipal buildings and private development.
- Periodically update municipal and community-wide GHG emissions inventories to determine the efficacy of adopted measures and to guide future policy formulation needed to achieve and maintain GHG emissions reduction targets.
- **RC-5-c GHG Reduction through Design and Operations.** Increase efforts to incorporate requirements for GHG emission reductions in land use entitlement decisions, facility design, and operational measures subject to City regulation through the following measures and strategies:
  - Promote the expansion of incentive-based programs that involve certification of projects for energy and water efficiency and resiliency. These certification programs and scoring systems may include public agency "Green" and conservation criteria, Energy Star™ certification, CALGreen Tier 1 or Tier 2, Leadership in Energy Efficient Design (LEED™) certification, etc.
  - Promote appropriate energy and water conservation standards and facilitate mixeduse projects, new incentives for infill development, and the incorporation of mass transit, bicycle and pedestrian amenities into public and private projects.
  - Require energy and water audits and upgrades for water conservation, energy efficiency, and mass transit, pedestrian, and bicycle amenities at the time of renovation, change in use, change in occupancy, and change in ownership for major projects meeting review thresholds specified in an implementing ordinance.
  - Incorporate the City's "Guidelines for Ponding Basin/Pond Construction and Management to Control Mosquito Breeding" as conditions of approval for any project using an on-site stormwater basin to prevent possible increases in vector-borne illnesses associated with global climate change.
  - Periodically evaluate the City's facility maintenance practices to determine whether there are additional opportunities to reduce GHGs through facility cleaning and painting, parks maintenance, road maintenance, and utility system maintenance.
  - Periodically evaluate standards and mitigation strategies for highly vehicle-dependent land uses and facilities, such as drive-through facilities and auto-oriented development.
- **RC-5-f Toolkit.** Provide residents and project applicants with a "toolkit" of generally feasible measures that can be used to reduce GHG emissions, including educational materials on energy-efficient and "climate-friendly" products.
- **RC-8-a Existing Standards and Programs.** Continue existing beneficial energy conservation programs, including adhering to the California Energy Code in new construction and major renovations.
- **RC-8-b Energy Reduction Targets.** Strive to reduce per capita residential electricity use to 1,800 kWh per year and non-residential electricity use to 2,700 kWh per year per capita by developing and implementing incentives, design and operation standards, promoting alternative energy sources, and cost-effective savings.

- **RC-8-c Energy Conservation in New Development.** Consider providing an incentive program for new buildings that exceed California Energy Code requirements by fifteen percent.
- **RC-8-e Energy Use Disclosure.** Promote compliance with State law mandating disclosure of a building's energy data and rating of the previous year to prospective buyers and lessees of the entire building or lenders financing the entire building.

While several of these policies are voluntary or are cannot be implemented by an individual development project, compliance with Title 24 standards would ensure that the proposed project would not conflict with any of the General Plan energy conservation policies related to the proposed project's building envelope, mechanical systems, and indoor and outdoor lighting. In addition, the proposed project would constitute development within an established community and would not be opening a new geographical area for development such that it would not result in unusually long trip lengths for future employees or vendors. The property is located at 5255 E. Home Ave, Fresno, CA 93727 -APN: 455-201-24, APN: 455-201-38 and is zoned as IL-Light Industrial with similar planned use.

For the above reasons, the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and impacts would be less than significant.

#### Attachments

Attachment A – CalEEMod Output and Additional Supporting Information

- Attachment B Health Risk Assessment
- Attachment C Energy Consumption Calculations

# ATTACHMENT A

## **CalEEMod Output and Additional Supporting Information**

## CalEEMod Output and Additional Supporting Information

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#### Home Avenue Warehouse Project Construction Assumptions

Construction Phase			Num Days			
Phase Name	Start Date	End Date	Week	Num Days	Notes	
Site Preparation	1/3/2022	1/14/2022	5	10		
Grading	1/15/2022	2/25/2022	5	30		
					Adjusted to ma	tch applicant-
Building Construction	2/26/2022	12/4/2022	5	200	provided sched	lule
Paving	2/26/2022	3/25/2022	5	20		
Architectural Coating	12/5/2022	12/30/2022	5	20		
OffRoad Equipment						
Phase Name	Offroad Equipme	ent Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Do	zers	3	8	247	0.40
Site Preparation	Tractors/Loaders	s/Backhoes	4	8	97	0.37
Grading	Excavators		2	8	158	0.38
Grading	Graders		1	8	187	0.41
Grading	Rubber Tired Do	zers	1	8	247	0.40
Grading	Scrapers		2	8	367	0.48
Grading	Tractors/Loaders	s/Backhoes	2	8	97	0.37
Building Construction	Cranes		1	7	231	0.29
Building Construction	Forklifts		3	8	89	0.20
Building Construction	Generator Sets		1	8	84	0.74
Building Construction	Tractors/Loaders	s/Backhoes	3	7	97	0.37
Building Construction	Welders		1	8	46	0.45
Paving	Pavers		2	8	130	0.42
Paving	Paving Equipme	nt	2	8	132	0.36
Paving	Rollers		2	8	80	0.38
Architectural Coating	Air Compressors	i	1	6	78	0.48
Construction Trips and	d VMT					
	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip
Phase Name	Number	Number	Number	Lenath	Lenath	Lenath

Phase Name	Number	Number	Number	Length	Length	Length
Site Preparation	18	0	44	10.8	7.3	20
Grading	20	0	516	10.8	7.3	20
Building Construction	188	73	18	10.8	7.3	20
Paving	15	4	12	10.8	7.3	20
Architectural Coating	38	4	2	10.8	7.3	20

Notes: Additional haul trips for mobilization/demobilization of on-site equipment. Haul trips included in site preparation for removal of billboard. Vendor trips added to the paving and architectural coating phases for delivery of materials.





## Home Avenue Warehouse Fleet Mix Adjustments (2023)

Home Avenue Warehouse - Fresno County 2023												Total		
	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	
	0.510058	0.053037	0.175964	0.1614	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.00309	1
														0
Trucks Only*														
	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	
	0	0	0	0.0000	0.0000000	0.0000000	0.0000000	1.0000000	0	0	0	0	0	1
Passenger														
Cars														
	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН	
Default Light														
Duty Fleet Mix	0.510058	0.053037	0.175964	0.1614	0	0	0	0	0	0	0	0	0	0.900455
,														
Difference to														
be allocated	0.099545													
Revised														
Passenger														
Cars Elect Mix														
2023		I DT1		MDV	LHD1	LHD2	мнр	ннр	OBUS	LIBUS	MCY	SBUS	МН	
2025	0 56644	0.05800	0 105/2	0 17024	0,0000	0.0000	0,00000	0.00000	0,0000	0.0000	0 00000	0,0000	0 00000	1 00000
	0.50044	0.05890	0.19542	0.1/924	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000

Home Avenue Warehouse 2005 Operational Year

## Home Avenue Warehouse Fleet Mix Adjustments (2005)

Home Avenue V	Varehouse - Fr	esno County	2005											Total
	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	
	0.477591	0.081668	0.164575	0.1681	0.03629	0.006715	0.016687	0.017024	0.000893	0.000307	0.021194	0.000966	0.0079815	1
														0
Trucks Only*														
	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	
	0	0	0	0.0000	0.0000000	0.0000000	0.0000000	1.0000000	0	0	0	0	0	1
Passenger														
Cars														
	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	
Default Light														
Duty Fleet Mix	0.477591	0.081668	0.164575	0.1681	0	0	0	0	0	0	0	0	0	0.891943
Difference to														
be allocated	0.108057													
Revised														
Passenger														
Cars Fleet Mix														
2005	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	
	0.53545	0.09156	0.18451	0.18848	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000

## Home Avenue Warehouse Fleet Mix Adjustments (2030)

Home Avenue Warehouse - Fresno County 2030												Total		
	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	
	0.542478	0.054482	0.176258	0.1347	0.021641	0.005926	0.015139	0.022678	0.000679	0.000278	0.021974	0.001325	0.002442	1
														0
Trucks Only*														
	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	
	0	0	0	0.0000	0.0000000	0.0000000	0.0000000	1.0000000	0	0	0	0	0	1
Passenger														
Cars														
	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН	
Default Light														
Duty Fleet Mix	0.542478	0.054482	0.176258	0.1347	0	0	0	0	0	0	0	0	0	0.907918
,														
Difference to														
be allocated	0.092082													
Revised														
Passenger														
Cars Fleet Mix														
2030		I DT1		MDV	LHD1	LHD2	MHD	ннр	OBUS	LIBUS	MCY	SBUS	мн	
2000	0 59750	0.06001	0 10/13	0 1/836	0.00000	0.00000	0.00000	0.00000	0,00000	0,00000	0.00000	0,00000	0 00000	1 00000
	0.59750	0.06001	0.19413	0.14836	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000

Home Avenue Warehouse Project - Project Construction and Operations (Passenger Vehicles + Building) - Fresno County, Annual

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

Home Avenue Warehouse Project - Project Construction and Operations (Passenger Vehicles + Building) Fresno County, Annual

Tresho count

#### **1.0 Project Characteristics**

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	170.00	1000sqft	3.90	170,000.00	0
Other Non-Asphalt Surfaces	0.96	Acre	0.96	41,817.60	0
Parking Lot	190.36	1000sqft	4.37	190,361.00	0
City Park	1.02	Acre	1.02	44,349.00	0

#### **1.2 Other Project Characteristics**

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			Operational Year	2023
Utility Company	Pacific Gas and E	Electric Company			
CO2 Intensity (Ib/MWhr)	203.98	CH4 Intensity (Ib/MWhr)	0.033	N2O Intensity (Ib/MWhr)	0.004

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Area, Building Operations, and Passenger Vehicle Operations - 2023 Unmitigated construction

Land Use - Up to 170,000-square-foot building; parking up to 190,361 sq ft; landscaping ~44,349 sq ft 10.25-acre site

Construction Phase - Construction Start Date: January 2022 Construction Duration: 12 months

Off-road Equipment - CalEEmod default amounts + hours/day retained These estimates remain appropriate, as the building construction would include tilt-up construction

Trips and VMT - Additional haul trips for mobilization/demobilization of on-site equipment. Haul trips included in site preparation for removal of billboard. Vendor trips added to the paving and architectural coating phases for delivery of materials.

Home Avenue Warehouse Project - Project Construction and Operations (Passenger Vehicles + Building) - Fresno County, Annual

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

Grading - Net of 4k cubic yards of cut to be export (12k c. y. fill & 16k c.y. cut)

Architectural Coating - SJVAPCD Rule 4601 Architectural Coatings

Vehicle Trips - Passenger car trip generation rate

202 daily passenger trips

Road Dust -

Area Coating - SJVAPCD Rule 4601 Architectural Coatings

Construction Off-road Equipment Mitigation - Compliance with SJVAPCD Regulation VIII

Water Mitigation - Calgreen Code and MWELO water conservation compliance

Waste Mitigation - CalRecycle 75% diversion mandate

Fleet Mix - Passenger vehicles consisting of LDA, LDT1, LDT2, and MDV Adjusted based on the 2023 operational year Fresno County fleet mix

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	50
tblAreaCoating	Area_EF_Nonresidential_Interior	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	300.00	200.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.51	0.57
tblFleetMix	LDT1	0.05	0.06
tblFleetMix	LDT2	0.18	0.20
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.0060e-003	0.00
tblFleetMix	МСҮ	0.02	0.00
tblFleetMix	MDV	0.16	0.18
tblFleetMix	МН	3.0900e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	OBUS	7.1700e-004	0.00

Home Avenue Warehouse Project - Project Construction and Operations (Passenger Vehicles + Building) - Fresno County, Annual

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

tblFleetMix	SBUS	1.5290e-003	0.00
tblFleetMix	UBUS	2.9100e-004	0.00
tblGrading	MaterialExported	0.00	4,000.00
tblLandUse	LandUseSquareFeet	190,360.00	190,361.00
tblLandUse	LandUseSquareFeet	44,431.20	44,349.00
tblTripsAndVMT	HaulingTripNumber	0.00	44.00
tblTripsAndVMT	HaulingTripNumber	500.00	516.00
tblTripsAndVMT	HaulingTripNumber	0.00	18.00
tblTripsAndVMT	HaulingTripNumber	0.00	12.00
tblTripsAndVMT	HaulingTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	1.74	1.19
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	1.74	1.19
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	1.74	1.19

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

## 2.1 Overall Construction

## **Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							МТ	/yr		
2022	0.7847	2.9234	2.9648	7.1900e- 003	0.4482	0.1255	0.5738	0.1628	0.1174	0.2802	0.0000	645.7475	645.7475	0.0995	0.0289	656.8375
Maximum	0.7847	2.9234	2.9648	7.1900e- 003	0.4482	0.1255	0.5738	0.1628	0.1174	0.2802	0.0000	645.7475	645.7475	0.0995	0.0289	656.8375

## Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							МТ	/yr		
2022	0.7847	2.9234	2.9648	7.1900e- 003	0.3181	0.1255	0.4436	0.1048	0.1174	0.2223	0.0000	645.7470	645.7470	0.0995	0.0289	656.8371
Maximum	0.7847	2.9234	2.9648	7.1900e- 003	0.3181	0.1255	0.4436	0.1048	0.1174	0.2223	0.0000	645.7470	645.7470	0.0995	0.0289	656.8371

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	29.03	0.00	22.68	35.60	0.00	20.68	0.00	0.00	0.00	0.00	0.00	0.00

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-3-2022	4-2-2022	1.2617	1.2617
2	4-3-2022	7-2-2022	0.7277	0.7277
3	7-3-2022	9-30-2022	0.7197	0.7197
		Highest	1.2617	1.2617

## 2.2 Overall Operational

#### Unmitigated Operational

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Area	0.7240	3.0000e- 005	3.3300e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.4700e- 003	6.4700e- 003	2.0000e- 005	0.0000	6.9000e- 003
Energy	0.0164	0.1493	0.1254	9.0000e- 004		0.0113	0.0113		0.0113	0.0113	0.0000	314.6068	314.6068	0.0277	5.9600e- 003	317.0766
Mobile	0.0588	0.0569	0.6581	1.9600e- 003	0.2180	1.0200e- 003	0.2190	0.0579	9.4000e- 004	0.0589	0.0000	179.5558	179.5558	6.1800e- 003	5.5200e- 003	181.3564
Waste	n					0.0000	0.0000		0.0000	0.0000	32.4562	0.0000	32.4562	1.9181	0.0000	80.4089
Water	n					0.0000	0.0000		0.0000	0.0000	12.4720	20.0752	32.5473	1.2843	0.0306	73.7844
Total	0.7991	0.2062	0.7868	2.8600e- 003	0.2180	0.0124	0.2304	0.0579	0.0123	0.0702	44.9283	514.2443	559.1726	3.2363	0.0421	652.6332

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

## 2.2 Overall Operational

## **Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Area	0.7240	3.0000e- 005	3.3300e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.4700e- 003	6.4700e- 003	2.0000e- 005	0.0000	6.9000e- 003
Energy	0.0164	0.1493	0.1254	9.0000e- 004		0.0113	0.0113		0.0113	0.0113	0.0000	314.6068	314.6068	0.0277	5.9600e- 003	317.0766
Mobile	0.0588	0.0569	0.6581	1.9600e- 003	0.2180	1.0200e- 003	0.2190	0.0579	9.4000e- 004	0.0589	0.0000	179.5558	179.5558	6.1800e- 003	5.5200e- 003	181.3564
Waste	n					0.0000	0.0000		0.0000	0.0000	24.3422	0.0000	24.3422	1.4386	0.0000	60.3067
Water	n					0.0000	0.0000		0.0000	0.0000	9.9776	16.0602	26.0378	1.0274	0.0245	59.0275
Total	0.7991	0.2062	0.7868	2.8600e- 003	0.2180	0.0124	0.2304	0.0579	0.0123	0.0702	34.3198	510.2293	544.5491	2.4999	0.0360	617.7741

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23.61	0.78	2.62	22.75	14.55	5.34

# 3.0 Construction Detail

## **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/3/2022	1/14/2022	5	10	
2	Grading	Grading	1/15/2022	2/25/2022	5	30	
3	Building Construction	Building Construction	2/26/2022	12/4/2022	5	200	Adjusted to match applicant- provided schedule

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

4	Paving	Paving	2/26/2022	3/25/2022	5	20	
5	Architectural Coating	Architectural Coating	12/5/2022	12/30/2022	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 5.33

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 255,015; Non-Residential Outdoor: 85,005; Striped Parking Area: 13,931 (Architectural Coating – sqft)

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

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

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	44.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	516.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	188.00	73.00	18.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	4.00	12.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	38.00	4.00	2.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

## **3.1 Mitigation Measures Construction**

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Site Preparation - 2022

**Unmitigated Construction On-Site** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	ī/yr		
Fugitive Dust			, , ,	, , ,	0.0983	0.0000	0.0983	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0159	0.1654	0.0985	1.9000e- 004		8.0600e- 003	8.0600e- 003		7.4200e- 003	7.4200e- 003	0.0000	16.7197	16.7197	5.4100e- 003	0.0000	16.8549
Total	0.0159	0.1654	0.0985	1.9000e- 004	0.0983	8.0600e- 003	0.1064	0.0505	7.4200e- 003	0.0579	0.0000	16.7197	16.7197	5.4100e- 003	0.0000	16.8549

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

## 3.2 Site Preparation - 2022

## Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	8.0000e- 005	3.3700e- 003	6.4000e- 004	1.0000e- 005	3.8000e- 004	3.0000e- 005	4.1000e- 004	1.0000e- 004	3.0000e- 005	1.4000e- 004	0.0000	1.2994	1.2994	1.0000e- 005	2.0000e- 004	1.3605
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e- 004	2.1000e- 004	2.3200e- 003	1.0000e- 005	7.2000e- 004	0.0000	7.2000e- 004	1.9000e- 004	0.0000	1.9000e- 004	0.0000	0.5845	0.5845	2.0000e- 005	2.0000e- 005	0.5903
Total	3.8000e- 004	3.5800e- 003	2.9600e- 003	2.0000e- 005	1.1000e- 003	3.0000e- 005	1.1300e- 003	2.9000e- 004	3.0000e- 005	3.3000e- 004	0.0000	1.8838	1.8838	3.0000e- 005	2.2000e- 004	1.9508

## **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	'/yr		
Fugitive Dust					0.0442	0.0000	0.0442	0.0227	0.0000	0.0227	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0159	0.1654	0.0985	1.9000e- 004		8.0600e- 003	8.0600e- 003		7.4200e- 003	7.4200e- 003	0.0000	16.7197	16.7197	5.4100e- 003	0.0000	16.8549
Total	0.0159	0.1654	0.0985	1.9000e- 004	0.0442	8.0600e- 003	0.0523	0.0227	7.4200e- 003	0.0302	0.0000	16.7197	16.7197	5.4100e- 003	0.0000	16.8549

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

## 3.2 Site Preparation - 2022

## Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	7/yr		
Hauling	8.0000e- 005	3.3700e- 003	6.4000e- 004	1.0000e- 005	3.8000e- 004	3.0000e- 005	4.1000e- 004	1.0000e- 004	3.0000e- 005	1.4000e- 004	0.0000	1.2994	1.2994	1.0000e- 005	2.0000e- 004	1.3605
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e- 004	2.1000e- 004	2.3200e- 003	1.0000e- 005	7.2000e- 004	0.0000	7.2000e- 004	1.9000e- 004	0.0000	1.9000e- 004	0.0000	0.5845	0.5845	2.0000e- 005	2.0000e- 005	0.5903
Total	3.8000e- 004	3.5800e- 003	2.9600e- 003	2.0000e- 005	1.1000e- 003	3.0000e- 005	1.1300e- 003	2.9000e- 004	3.0000e- 005	3.3000e- 004	0.0000	1.8838	1.8838	3.0000e- 005	2.2000e- 004	1.9508

## 3.3 Grading - 2022

## Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust					0.1383	0.0000	0.1383	0.0548	0.0000	0.0548	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0544	0.5827	0.4356	9.3000e- 004		0.0245	0.0245		0.0226	0.0226	0.0000	81.8019	81.8019	0.0265	0.0000	82.4633
Total	0.0544	0.5827	0.4356	9.3000e- 004	0.1383	0.0245	0.1628	0.0548	0.0226	0.0774	0.0000	81.8019	81.8019	0.0265	0.0000	82.4633

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

## 3.3 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	9.7000e- 004	0.0395	7.5200e- 003	1.6000e- 004	4.4200e- 003	3.9000e- 004	4.8100e- 003	1.2100e- 003	3.8000e- 004	1.5900e- 003	0.0000	15.2378	15.2378	1.2000e- 004	2.4000e- 003	15.9549
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0100e- 003	6.9000e- 004	7.7400e- 003	2.0000e- 005	2.4000e- 003	1.0000e- 005	2.4100e- 003	6.4000e- 004	1.0000e- 005	6.5000e- 004	0.0000	1.9483	1.9483	6.0000e- 005	6.0000e- 005	1.9676
Total	1.9800e- 003	0.0402	0.0153	1.8000e- 004	6.8200e- 003	4.0000e- 004	7.2200e- 003	1.8500e- 003	3.9000e- 004	2.2400e- 003	0.0000	17.1861	17.1861	1.8000e- 004	2.4600e- 003	17.9226

## **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust					0.0622	0.0000	0.0622	0.0247	0.0000	0.0247	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0544	0.5827	0.4356	9.3000e- 004		0.0245	0.0245		0.0226	0.0226	0.0000	81.8018	81.8018	0.0265	0.0000	82.4632
Total	0.0544	0.5827	0.4356	9.3000e- 004	0.0622	0.0245	0.0868	0.0247	0.0226	0.0472	0.0000	81.8018	81.8018	0.0265	0.0000	82.4632

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

## 3.3 Grading - 2022

## **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	9.7000e- 004	0.0395	7.5200e- 003	1.6000e- 004	4.4200e- 003	3.9000e- 004	4.8100e- 003	1.2100e- 003	3.8000e- 004	1.5900e- 003	0.0000	15.2378	15.2378	1.2000e- 004	2.4000e- 003	15.9549
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0100e- 003	6.9000e- 004	7.7400e- 003	2.0000e- 005	2.4000e- 003	1.0000e- 005	2.4100e- 003	6.4000e- 004	1.0000e- 005	6.5000e- 004	0.0000	1.9483	1.9483	6.0000e- 005	6.0000e- 005	1.9676
Total	1.9800e- 003	0.0402	0.0153	1.8000e- 004	6.8200e- 003	4.0000e- 004	7.2200e- 003	1.8500e- 003	3.9000e- 004	2.2400e- 003	0.0000	17.1861	17.1861	1.8000e- 004	2.4600e- 003	17.9226

## 3.4 Building Construction - 2022

## Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	0.1706	1.5616	1.6363	2.6900e- 003		0.0809	0.0809		0.0761	0.0761	0.0000	231.7252	231.7252	0.0555	0.0000	233.1131
Total	0.1706	1.5616	1.6363	2.6900e- 003		0.0809	0.0809		0.0761	0.0761	0.0000	231.7252	231.7252	0.0555	0.0000	233.1131

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

## 3.4 Building Construction - 2022

## Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	3.0000e- 005	1.3800e- 003	2.6000e- 004	1.0000e- 005	1.5000e- 004	1.0000e- 005	1.7000e- 004	4.0000e- 005	1.0000e- 005	6.0000e- 005	0.0000	0.5316	0.5316	0.0000	8.0000e- 005	0.5566
Vendor	0.0150	0.3937	0.1115	1.5200e- 003	0.0484	4.2400e- 003	0.0526	0.0140	4.0600e- 003	0.0180	0.0000	145.7729	145.7729	1.1000e- 003	0.0220	152.3461
Worker	0.0632	0.0431	0.4853	1.3300e- 003	0.1503	7.7000e- 004	0.1511	0.0400	7.1000e- 004	0.0407	0.0000	122.0925	122.0925	4.0100e- 003	3.7300e- 003	123.3047
Total	0.0783	0.4381	0.5970	2.8600e- 003	0.1989	5.0200e- 003	0.2039	0.0540	4.7800e- 003	0.0588	0.0000	268.3970	268.3970	5.1100e- 003	0.0258	276.2074

## **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	0.1706	1.5616	1.6363	2.6900e- 003		0.0809	0.0809	1 1 1	0.0761	0.0761	0.0000	231.7250	231.7250	0.0555	0.0000	233.1128
Total	0.1706	1.5616	1.6363	2.6900e- 003		0.0809	0.0809		0.0761	0.0761	0.0000	231.7250	231.7250	0.0555	0.0000	233.1128

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

## 3.4 Building Construction - 2022

## **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	3.0000e- 005	1.3800e- 003	2.6000e- 004	1.0000e- 005	1.5000e- 004	1.0000e- 005	1.7000e- 004	4.0000e- 005	1.0000e- 005	6.0000e- 005	0.0000	0.5316	0.5316	0.0000	8.0000e- 005	0.5566
Vendor	0.0150	0.3937	0.1115	1.5200e- 003	0.0484	4.2400e- 003	0.0526	0.0140	4.0600e- 003	0.0180	0.0000	145.7729	145.7729	1.1000e- 003	0.0220	152.3461
Worker	0.0632	0.0431	0.4853	1.3300e- 003	0.1503	7.7000e- 004	0.1511	0.0400	7.1000e- 004	0.0407	0.0000	122.0925	122.0925	4.0100e- 003	3.7300e- 003	123.3047
Total	0.0783	0.4381	0.5970	2.8600e- 003	0.1989	5.0200e- 003	0.2039	0.0540	4.7800e- 003	0.0588	0.0000	268.3970	268.3970	5.1100e- 003	0.0258	276.2074

## 3.5 Paving - 2022

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0110	0.1113	0.1458	2.3000e- 004		5.6800e- 003	5.6800e- 003		5.2200e- 003	5.2200e- 003	0.0000	20.0276	20.0276	6.4800e- 003	0.0000	20.1895
Paving	5.7200e- 003		1			0.0000	0.0000	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0168	0.1113	0.1458	2.3000e- 004		5.6800e- 003	5.6800e- 003		5.2200e- 003	5.2200e- 003	0.0000	20.0276	20.0276	6.4800e- 003	0.0000	20.1895

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

## 3.5 Paving - 2022

## Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	7/yr		
Hauling	2.0000e- 005	9.2000e- 004	1.7000e- 004	0.0000	1.0000e- 004	1.0000e- 005	1.1000e- 004	3.0000e- 005	1.0000e- 005	4.0000e- 005	0.0000	0.3544	0.3544	0.0000	6.0000e- 005	0.3710
Vendor	8.0000e- 005	2.1600e- 003	6.1000e- 004	1.0000e- 005	2.7000e- 004	2.0000e- 005	2.9000e- 004	8.0000e- 005	2.0000e- 005	1.0000e- 004	0.0000	0.7988	0.7988	1.0000e- 005	1.2000e- 004	0.8348
Worker	5.0000e- 004	3.4000e- 004	3.8700e- 003	1.0000e- 005	1.2000e- 003	1.0000e- 005	1.2100e- 003	3.2000e- 004	1.0000e- 005	3.2000e- 004	0.0000	0.9741	0.9741	3.0000e- 005	3.0000e- 005	0.9838
Total	6.0000e- 004	3.4200e- 003	4.6500e- 003	2.0000e- 005	1.5700e- 003	4.0000e- 005	1.6100e- 003	4.3000e- 004	4.0000e- 005	4.6000e- 004	0.0000	2.1273	2.1273	4.0000e- 005	2.1000e- 004	2.1896

## **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0110	0.1113	0.1458	2.3000e- 004		5.6800e- 003	5.6800e- 003		5.2200e- 003	5.2200e- 003	0.0000	20.0275	20.0275	6.4800e- 003	0.0000	20.1895
Paving	5.7200e- 003		1 1 1 1 1			0.0000	0.0000	1 1 1 1 1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0168	0.1113	0.1458	2.3000e- 004		5.6800e- 003	5.6800e- 003		5.2200e- 003	5.2200e- 003	0.0000	20.0275	20.0275	6.4800e- 003	0.0000	20.1895

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

## 3.5 Paving - 2022

## **Mitigated Construction Off-Site**

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	2.0000e- 005	9.2000e- 004	1.7000e- 004	0.0000	1.0000e- 004	1.0000e- 005	1.1000e- 004	3.0000e- 005	1.0000e- 005	4.0000e- 005	0.0000	0.3544	0.3544	0.0000	6.0000e- 005	0.3710
Vendor	8.0000e- 005	2.1600e- 003	6.1000e- 004	1.0000e- 005	2.7000e- 004	2.0000e- 005	2.9000e- 004	8.0000e- 005	2.0000e- 005	1.0000e- 004	0.0000	0.7988	0.7988	1.0000e- 005	1.2000e- 004	0.8348
Worker	5.0000e- 004	3.4000e- 004	3.8700e- 003	1.0000e- 005	1.2000e- 003	1.0000e- 005	1.2100e- 003	3.2000e- 004	1.0000e- 005	3.2000e- 004	0.0000	0.9741	0.9741	3.0000e- 005	3.0000e- 005	0.9838
Total	6.0000e- 004	3.4200e- 003	4.6500e- 003	2.0000e- 005	1.5700e- 003	4.0000e- 005	1.6100e- 003	4.3000e- 004	4.0000e- 005	4.6000e- 004	0.0000	2.1273	2.1273	4.0000e- 005	2.1000e- 004	2.1896

## 3.6 Architectural Coating - 2022

## **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Archit. Coating	0.4424					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0500e- 003	0.0141	0.0181	3.0000e- 005		8.2000e- 004	8.2000e- 004		8.2000e- 004	8.2000e- 004	0.0000	2.5533	2.5533	1.7000e- 004	0.0000	2.5574
Total	0.4445	0.0141	0.0181	3.0000e- 005		8.2000e- 004	8.2000e- 004		8.2000e- 004	8.2000e- 004	0.0000	2.5533	2.5533	1.7000e- 004	0.0000	2.5574

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

# 3.6 Architectural Coating - 2022

## Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	7/yr		
Hauling	0.0000	1.5000e- 004	3.0000e- 005	0.0000	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0000	1.0000e- 005	0.0000	0.0591	0.0591	0.0000	1.0000e- 005	0.0618
Vendor	8.0000e- 005	2.1600e- 003	6.1000e- 004	1.0000e- 005	2.7000e- 004	2.0000e- 005	2.9000e- 004	8.0000e- 005	2.0000e- 005	1.0000e- 004	0.0000	0.7988	0.7988	1.0000e- 005	1.2000e- 004	0.8348
Worker	1.2800e- 003	8.7000e- 004	9.8100e- 003	3.0000e- 005	3.0400e- 003	2.0000e- 005	3.0500e- 003	8.1000e- 004	1.0000e- 005	8.2000e- 004	0.0000	2.4678	2.4678	8.0000e- 005	8.0000e- 005	2.4923
Total	1.3600e- 003	3.1800e- 003	0.0105	4.0000e- 005	3.3300e- 003	4.0000e- 005	3.3600e- 003	8.9000e- 004	3.0000e- 005	9.3000e- 004	0.0000	3.3257	3.3257	9.0000e- 005	2.1000e- 004	3.3889

#### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Archit. Coating	0.4424	1 1 1	1	, , ,		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0500e- 003	0.0141	0.0181	3.0000e- 005		8.2000e- 004	8.2000e- 004		8.2000e- 004	8.2000e- 004	0.0000	2.5533	2.5533	1.7000e- 004	0.0000	2.5574
Total	0.4445	0.0141	0.0181	3.0000e- 005		8.2000e- 004	8.2000e- 004		8.2000e- 004	8.2000e- 004	0.0000	2.5533	2.5533	1.7000e- 004	0.0000	2.5574

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

# 3.6 Architectural Coating - 2022

## **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	ıs/yr							MT	/yr		
Hauling	0.0000	1.5000e- 004	3.0000e- 005	0.0000	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0000	1.0000e- 005	0.0000	0.0591	0.0591	0.0000	1.0000e- 005	0.0618
Vendor	8.0000e- 005	2.1600e- 003	6.1000e- 004	1.0000e- 005	2.7000e- 004	2.0000e- 005	2.9000e- 004	8.0000e- 005	2.0000e- 005	1.0000e- 004	0.0000	0.7988	0.7988	1.0000e- 005	1.2000e- 004	0.8348
Worker	1.2800e- 003	8.7000e- 004	9.8100e- 003	3.0000e- 005	3.0400e- 003	2.0000e- 005	3.0500e- 003	8.1000e- 004	1.0000e- 005	8.2000e- 004	0.0000	2.4678	2.4678	8.0000e- 005	8.0000e- 005	2.4923
Total	1.3600e- 003	3.1800e- 003	0.0105	4.0000e- 005	3.3300e- 003	4.0000e- 005	3.3600e- 003	8.9000e- 004	3.0000e- 005	9.3000e- 004	0.0000	3.3257	3.3257	9.0000e- 005	2.1000e- 004	3.3889

## 4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Mitigated	0.0588	0.0569	0.6581	1.9600e- 003	0.2180	1.0200e- 003	0.2190	0.0579	9.4000e- 004	0.0589	0.0000	179.5558	179.5558	6.1800e- 003	5.5200e- 003	181.3564
Unmitigated	0.0588	0.0569	0.6581	1.9600e- 003	0.2180	1.0200e- 003	0.2190	0.0579	9.4000e- 004	0.0589	0.0000	179.5558	179.5558	6.1800e- 003	5.5200e- 003	181.3564

# 4.2 Trip Summary Information

	Aver	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	202.00	202.00	202.00	589,741	589,741
Total	202.00	202.00	202.00	589,741	589,741

## 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090
Other Non-Asphalt Surfaces	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090
Parking Lot	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090
Unrefrigerated Warehouse-No Rail	0.566440	0.058900	0.195420	0.179240	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

# 5.0 Energy Detail

## Historical Energy Use: N

## 5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	152.1300	152.1300	0.0246	2.9800e- 003	153.6343
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	152.1300	152.1300	0.0246	2.9800e- 003	153.6343
NaturalGas Mitigated	0.0164	0.1493	0.1254	9.0000e- 004		0.0113	0.0113		0.0113	0.0113	0.0000	162.4768	162.4768	3.1100e- 003	2.9800e- 003	163.4423
NaturalGas Unmitigated	0.0164	0.1493	0.1254	9.0000e- 004		0.0113	0.0113		0.0113	0.0113	0.0000	162.4768	162.4768	3.1100e- 003	2.9800e- 003	163.4423

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

## 5.2 Energy by Land Use - NaturalGas

## **Unmitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							МТ	/yr		
City Park	0	0.0000	0.0000	0.0000	0.0000	1 1 1	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	3.0447e +006	0.0164	0.1493	0.1254	9.0000e- 004		0.0113	0.0113		0.0113	0.0113	0.0000	162.4768	162.4768	3.1100e- 003	2.9800e- 003	163.4423
Total		0.0164	0.1493	0.1254	9.0000e- 004		0.0113	0.0113		0.0113	0.0113	0.0000	162.4768	162.4768	3.1100e- 003	2.9800e- 003	163.4423

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

## 5.2 Energy by Land Use - NaturalGas

## Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							МТ	/yr		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	3.0447e +006	0.0164	0.1493	0.1254	9.0000e- 004		0.0113	0.0113		0.0113	0.0113	0.0000	162.4768	162.4768	3.1100e- 003	2.9800e- 003	163.4423
Total		0.0164	0.1493	0.1254	9.0000e- 004		0.0113	0.0113		0.0113	0.0113	0.0000	162.4768	162.4768	3.1100e- 003	2.9800e- 003	163.4423

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

# 5.3 Energy by Land Use - Electricity

## **Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	66626.3	6.1645	1.0000e- 003	1.2000e- 004	6.2255
Unrefrigerated Warehouse-No Rail	1.5776e +006	145.9655	0.0236	2.8600e- 003	147.4088
Total		152.1300	0.0246	2.9800e- 003	153.6343

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

## 5.3 Energy by Land Use - Electricity

## Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	66626.3	6.1645	1.0000e- 003	1.2000e- 004	6.2255
Unrefrigerated Warehouse-No Rail	1.5776e +006	145.9655	0.0236	2.8600e- 003	147.4088
Total		152.1300	0.0246	2.9800e- 003	153.6343

## 6.0 Area Detail

6.1 Mitigation Measures Area

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Mitigated	0.7240	3.0000e- 005	3.3300e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.4700e- 003	6.4700e- 003	2.0000e- 005	0.0000	6.9000e- 003
Unmitigated	0.7240	3.0000e- 005	3.3300e- 003	0.0000		1.0000e- 005	1.0000e- 005	 - - -	1.0000e- 005	1.0000e- 005	0.0000	6.4700e- 003	6.4700e- 003	2.0000e- 005	0.0000	6.9000e- 003

## 6.2 Area by SubCategory

**Unmitigated** 

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							MT	ſ/yr		
Architectural Coating	0.0442					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6794					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.1000e- 004	3.0000e- 005	3.3300e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.4700e- 003	6.4700e- 003	2.0000e- 005	0.0000	6.9000e- 003
Total	0.7240	3.0000e- 005	3.3300e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.4700e- 003	6.4700e- 003	2.0000e- 005	0.0000	6.9000e- 003

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

## 6.2 Area by SubCategory

### Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	ſ/yr		
Architectural Coating	0.0442					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6794					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.1000e- 004	3.0000e- 005	3.3300e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.4700e- 003	6.4700e- 003	2.0000e- 005	0.0000	6.9000e- 003
Total	0.7240	3.0000e- 005	3.3300e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.4700e- 003	6.4700e- 003	2.0000e- 005	0.0000	6.9000e- 003

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

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

	Total CO2	CH4	N2O	CO2e
Category		МТ	/yr	
Mitigated	26.0378	1.0274	0.0245	59.0275
Unmitigated	32.5473	1.2843	0.0306	73.7844

# 7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	/yr	
City Park	0/ 1.21531	0.3936	6.0000e- 005	1.0000e- 005	0.3975
Other Non- Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	39.3125 / 0	32.1537	1.2842	0.0306	73.3869
Total		32.5473	1.2842	0.0306	73.7844

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

### 7.2 Water by Land Use

#### **Mitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	/yr	
City Park	0 / 0.972249	0.3149	5.0000e- 005	1.0000e- 005	0.3180
Other Non- Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	31.45/0	25.7230	1.0274	0.0245	58.7095
Total		26.0378	1.0274	0.0245	59.0275

## 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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

#### Category/Year

	Total CO2	CH4	N2O	CO2e
		MT	/yr	
Mitigated	24.3422	1.4386	0.0000	60.3067
Unmitigated	32.4562	1.9181	0.0000	80.4089

# 8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	/yr	
City Park	0.09	0.0183	1.0800e- 003	0.0000	0.0453
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	159.8	32.4380	1.9170	0.0000	80.3637
Total		32.4562	1.9181	0.0000	80.4089

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

#### 8.2 Waste by Land Use

**Mitigated** 

	Waste Disposed	Total CO2	CH4	N2O	CO2e					
Land Use	tons		MT/yr							
City Park	0.0675	0.0137	8.1000e- 004	0.0000	0.0340					
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000					
Unrefrigerated Warehouse-No Rail	119.85	24.3285	1.4378	0.0000	60.2728					
Total		24.3422	1.4386	0.0000	60.3067					

## 9.0 Operational Offroad

Equipment Type Number Hours/Day Days/Year Horse Power Load Factor Fuel Type							
	Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

## **10.0 Stationary Equipment**

## Fire Pumps and Emergency Generators

|--|

#### **Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

**User Defined Equipment** 

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

Equipment Type

Number

11.0 Vegetation

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

## Home Avenue Warehouse Project - Project Truck Operations

Fresno County, Annual

## **1.0 Project Characteristics**

## 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	170.00	1000sqft	3.90	170,000.00	0
Other Non-Asphalt Surfaces	0.96	Acre	0.96	41,817.60	0
Parking Lot	190.36	1000sqft	4.37	190,361.00	0
City Park	1.02	Acre	1.02	44,349.00	0

## **1.2 Other Project Characteristics**

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			Operational Year	2023
Utility Company	Pacific Gas and E	Electric Company			
CO2 Intensity (Ib/MWhr)	203.98	CH4 Intensity (Ib/MWhr)	0.033	N2O Intensity (Ib/MWhr)	).004

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Truck Operations - 2023

Land Use - Up to 170,000-square-foot building; parking up to 190,361 sq ft; landscaping ~44,349 sq ft 10.25-acre site

Construction Phase - Operational truck only run - zeroed out construction parameters

Off-road Equipment - Operational truck only run - zeroed out construction parameters

Trips and VMT - Operational truck only run - zeroed out construction parameters

Architectural Coating - Operational truck only run - zeroed out construction parameters

Vehicle Trips - Truck trip generation rate

50-mile trip length for SJVAPCD truck only runs and 100% primary trips

Consumer Products - Operational truck only run - zeroed out area parameters

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

Area Coating - Operational truck only run - zeroed out area parameters

Landscape Equipment - Operational truck only run - zeroed out area parameters

Energy Use - Truck only run

Water And Wastewater - Operational truck only run - water and wastewater in a separate run

Solid Waste - Truck only run

Fleet Mix - Truck operational fleet mix (100% 4+ axle trucks)

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Table Name	Column Name	Default Value	New Value		
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	0.00		
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	0.00		
tblArchitecturalCoating	EF_Parking	150.00	0.00		
tblAreaCoating	ReapplicationRatePercent	10	0		
tblConstructionPhase	NumDays	20.00	1.00		
tblConsumerProducts	ROG_EF	2.14E-05	1E-07		
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	1E-10		
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	1E-11		
tblEnergyUse	LightingElect	0.35	0.00		
tblEnergyUse	LightingElect	3.22	0.00		
tblEnergyUse	NT24E	5.13	0.00		
tblEnergyUse	NT24NG	1.05	0.00		
tblEnergyUse	T24E	0.93	0.00		
tblEnergyUse	T24NG	16.86	0.00		
tblFleetMix	HHD	0.02	1.00		
tblFleetMix	LDA	0.51	0.00		
tblFleetMix	LDT1	0.05	0.00		
tblFleetMix	LDT2	0.18	0.00		

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

tblFleetMix	LHD1	0.03	0.00		
tblFleetMix	LHD2	7.0060e-003	0.00		
tblFleetMix	MCY	0.02	0.00		
tblFleetMix	MDV	0.16	0.00		
tblFleetMix	МН	3.0900e-003	0.00		
tblFleetMix	MHD	0.01	0.00		
tblFleetMix	OBUS	7.1700e-004	0.00		
tblFleetMix	SBUS	1.5290e-003	0.00		
tblFleetMix	UBUS	2.9100e-004	0.00		
tblLandscapeEquipment	NumberSummerDays	180	1		
tblLandUse	LandUseSquareFeet	190,360.00	190,361.00		
tblLandUse	LandUseSquareFeet	44,431.20	44,349.00		
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00		
tblOffRoadEquipment	UsageHours	6.00	0.00		
tblSolidWaste	SolidWasteGenerationRate	0.09	0.00		
tblSolidWaste	SolidWasteGenerationRate	159.80	0.00		
tblTripsAndVMT	WorkerTripNumber	38.00	0.00		
tblVehicleTrips	CC_TL	7.30	50.00		
tblVehicleTrips	CNW_TL	7.30	50.00		
tblVehicleTrips	CW_TL	9.50	50.00		
tblVehicleTrips	DV_TP	5.00	0.00		
tblVehicleTrips	PB_TP	3.00	0.00		
tblVehicleTrips	PR_TP	92.00	100.00		
tblVehicleTrips	ST_TR	1.96	0.00		
tblVehicleTrips	ST_TR	1.74	0.55		
tblVehicleTrips	SU_TR	2.19	0.00		
tblVehicleTrips	SU_TR	1.74	0.55		
tblVehicleTrips	WD_TR	0.78	0.00		
tblVehicleTrips	WD_TR	1.74	0.55		

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

tblWater	IndoorWaterUseRate	39,312,500.00	0.00
tblWater	OutdoorWaterUseRate	1,215,310.98	0.00

# 2.0 Emissions Summary

## 2.1 Overall Construction

## **Unmitigated Construction**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr									MT/yr						
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

#### **Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr									MT/yr						
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

## 2.2 Overall Operational

## Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category					ton	s/yr					MT/yr							
Area	3.1100e- 003	0.0000	2.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e- 005	4.0000e- 005	0.0000	0.0000	4.0000e- 005		
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Mobile	0.0623	4.8479	0.7033	0.0244	0.7312	0.0501	0.7812	0.2010	0.0479	0.2489	0.0000	2,345.700 9	2,345.700 9	0.0146	0.3689	2,456.006 3		
Waste	n					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Total	0.0654	4.8479	0.7033	0.0244	0.7312	0.0501	0.7812	0.2010	0.0479	0.2489	0.0000	2,345.700 9	2,345.700 9	0.0146	0.3689	2,456.006 4		

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

## 2.2 Overall Operational

## **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Area	3.1100e- 003	0.0000	2.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e- 005	4.0000e- 005	0.0000	0.0000	4.0000e- 005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0623	4.8479	0.7033	0.0244	0.7312	0.0501	0.7812	0.2010	0.0479	0.2489	0.0000	2,345.700 9	2,345.700 9	0.0146	0.3689	2,456.006 3
Waste	n					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0654	4.8479	0.7033	0.0244	0.7312	0.0501	0.7812	0.2010	0.0479	0.2489	0.0000	2,345.700 9	2,345.700 9	0.0146	0.3689	2,456.006 4

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

# **3.0 Construction Detail**

#### **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	7/1/2021	7/1/2021	5	1	

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

Acres of Grading (Grading Phase): 0

#### Acres of Paving: 5.33

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 255,015; Non-Residential Outdoor: 85,005; Striped Parking Area: 13,931 (Architectural Coating – sqft)

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	0.00	78	0.48

#### Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
	Count	Number	Number	Number	Length	Length	Length	Class	Vehicle Class	Vehicle Class
Architectural Coating	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction** 

#### 3.2 Architectural Coating - 2021

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	1 1 1 1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

# 3.2 Architectural Coating - 2021

## Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

# 3.2 Architectural Coating - 2021

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

# 4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Mitigated	0.0623	4.8479	0.7033	0.0244	0.7312	0.0501	0.7812	0.2010	0.0479	0.2489	0.0000	2,345.700 9	2,345.700 9	0.0146	0.3689	2,456.006 3
Unmitigated	0.0623	4.8479	0.7033	0.0244	0.7312	0.0501	0.7812	0.2010	0.0479	0.2489	0.0000	2,345.700 9	2,345.700 9	0.0146	0.3689	2,456.006 3

# 4.2 Trip Summary Information

	Aver	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	94.00	94.00	94.00	1,710,800	1,710,800
Total	94.00	94.00	94.00	1,710,800	1,710,800

# 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	50.00	50.00	50.00	59.00	0.00	41.00	100	0	0

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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090
Other Non-Asphalt Surfaces	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090
Parking Lot	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000

# 5.0 Energy Detail

### Historical Energy Use: N

# 5.1 Mitigation Measures Energy

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

# 5.2 Energy by Land Use - NaturalGas

#### **Unmitigated**

	NaturalGa s Use	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	∵/yr		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

# 5.2 Energy by Land Use - NaturalGas

#### Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
City Park	0	0.0000	0.0000	0.0000	0.0000	1 1 1	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000	1 1 1	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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

# 5.3 Energy by Land Use - Electricity

# Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

# 6.0 Area Detail

6.1 Mitigation Measures Area

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Mitigated	3.1100e- 003	0.0000	2.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e- 005	4.0000e- 005	0.0000	0.0000	4.0000e- 005
Unmitigated	3.1100e- 003	0.0000	2.0000e- 005	0.0000		0.0000	0.0000	 - - -	0.0000	0.0000	0.0000	4.0000e- 005	4.0000e- 005	0.0000	0.0000	4.0000e- 005

# 6.2 Area by SubCategory

#### **Unmitigated**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	/yr		
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.1100e- 003		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	,	,	0.0000	0.0000	,	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e- 005	0.0000	,	0.0000	0.0000	,	0.0000	0.0000	0.0000	4.0000e- 005	4.0000e- 005	0.0000	0.0000	4.0000e- 005
Total	3.1100e- 003	0.0000	2.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e- 005	4.0000e- 005	0.0000	0.0000	4.0000e- 005

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

# 6.2 Area by SubCategory

## **Mitigated**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	/yr		
Architectural Coating	0.0000	1 1 1	1 1 1			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.1100e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e- 005	4.0000e- 005	0.0000	0.0000	4.0000e- 005
Total	3.1100e- 003	0.0000	2.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e- 005	4.0000e- 005	0.0000	0.0000	4.0000e- 005

# 7.0 Water Detail

7.1 Mitigation Measures Water

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

	Total CO2	CH4	N2O	CO2e
Category		МТ	/yr	
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

# 7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e		
Land Use	Mgal	MT/yr					
City Park	0/0	0.0000	0.0000	0.0000	0.0000		
Other Non- Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000		
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000		
Unrefrigerated Warehouse-No Rail	0/0	0.0000	0.0000	0.0000	0.0000		
Total		0.0000	0.0000	0.0000	0.0000		

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

## 7.2 Water by Land Use

## Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e		
Land Use	Mgal	MT/yr					
City Park	0/0	0.0000	0.0000	0.0000	0.0000		
Other Non- Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000		
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000		
Unrefrigerated Warehouse-No Rail	0/0	0.0000	0.0000	0.0000	0.0000		
Total		0.0000	0.0000	0.0000	0.0000		

# 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

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

#### Category/Year

	Total CO2	CH4	N2O	CO2e			
	MT/yr						
Mitigated	0.0000	0.0000	0.0000	0.0000			
Unmitigated	0.0000	0.0000	0.0000	0.0000			

# 8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e		
Land Use	tons	MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		
Total		0.0000	0.0000	0.0000	0.0000		

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

#### 8.2 Waste by Land Use

**Mitigated** 

	Waste Disposed	Total CO2	CH4	N2O	CO2e		
Land Use	tons	MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		
Total		0.0000	0.0000	0.0000	0.0000		

# 9.0 Operational Offroad

Equipment Type Number Hours/Day Days/Year Horse Power Load Factor							
	Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

# **10.0 Stationary Equipment**

#### Fire Pumps and Emergency Generators

Equipment Type Number Hours/Day Hours/Year Horse Power Load Factor Fuel Type	Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
--	----------------	--------	-----------	------------	-------------	-------------	-----------

#### **Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

**User Defined Equipment** 

Number

Home Avenue Warehouse Project - Project Truck Operations - Fresno County, Annual

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

Equipment Type

11.0 Vegetation

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

Home Ave Warehouse Project - Construction & Operations (Autos + Building) - Localized Assessment Fresno County, Summer

# **1.0 Project Characteristics**

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	170.00	1000sqft	3.90	170,000.00	0
Other Non-Asphalt Surfaces	0.96	Acre	0.96	41,817.60	0
Parking Lot	190.36	1000sqft	4.37	190,361.00	0
City Park	1.02	Acre	1.02	44,349.00	0

## **1.2 Other Project Characteristics**

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			Operational Year	2023
Utility Company	Pacific Gas and E	Electric Company			
CO2 Intensity (Ib/MWhr)	203.98	CH4 Intensity (Ib/MWhr)	0.033	N2O Intensity (Ib/MWhr)	0.004

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Localized Screening Analysis - On-site Emissions Area, Building Operations, and Passenger Vehicle Operations - 2023 Unmitigated construction

Land Use - Up to 170,000-square-foot building; parking up to 190,361 sq ft; landscaping ~44,349 sq ft 10.25-acre site

Construction Phase - Construction Start Date: January 2022 Construction Duration: 12 months

Off-road Equipment - CalEEmod default amounts + hours/day retained

These estimates remain appropriate, as the building construction would include tilt-up construction

Trips and VMT - Trip lengths for construction trips updated to 0.43 mile to account for on-site emissions from mobile sources.

Grading - Net of 4k cubic yards of cut to be export (12k c. y. fill & 16k c.y. cut)

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

Architectural Coating - SJVAPCD Rule 4601 Architectural Coatings

Vehicle Trips - Passenger car trip generation rate

202 daily passenger trips

Trip lengths updated to 0.43 mile to account for on-site emissions from mobile sources.

Road Dust -

Area Coating - SJVAPCD Rule 4601 Architectural Coatings

Construction Off-road Equipment Mitigation - Compliance with SJVAPCD Regulation VIII

Water Mitigation - Calgreen Code and MWELO water conservation compliance

Waste Mitigation - CalRecycle 75% diversion mandate

Fleet Mix - Passenger vehicles consisting of LDA, LDT1, LDT2, and MDV Adjusted based on the 2023 operational year Fresno County fleet mix

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	50
tblAreaCoating	Area_EF_Nonresidential_Interior	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	300.00	200.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.51	0.57
tblFleetMix	LDT1	0.05	0.06
tblFleetMix	LDT2	0.18	0.20
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.0060e-003	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.16	0.18
tblFleetMix	МН	3.0900e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	OBUS	7.1700e-004	0.00
tblFleetMix	SBUS	1.5290e-003	0.00

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

tblFleetMix	UBUS	2.9100e-004	0.00
tblGrading	MaterialExported	0.00	4,000.00
tblLandUse	LandUseSquareFeet	190,360.00	190,361.00
tblLandUse	LandUseSquareFeet	44,431.20	44,349.00
tblTripsAndVMT	HaulingTripLength	20.00	0.43
tblTripsAndVMT	HaulingTripLength	20.00	0.43
tblTripsAndVMT	HaulingTripLength	20.00	0.43
tblTripsAndVMT	HaulingTripLength	20.00	0.43
tblTripsAndVMT	HaulingTripLength	20.00	0.43
tblTripsAndVMT	HaulingTripNumber	0.00	44.00
tblTripsAndVMT	HaulingTripNumber	500.00	516.00
tblTripsAndVMT	HaulingTripNumber	0.00	18.00
tblTripsAndVMT	HaulingTripNumber	0.00	12.00
tblTripsAndVMT	HaulingTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripLength	7.30	0.43
tblTripsAndVMT	VendorTripLength	7.30	0.43
tblTripsAndVMT	VendorTripLength	7.30	0.43
tblTripsAndVMT	VendorTripLength	7.30	0.43
tblTripsAndVMT	VendorTripLength	7.30	0.43
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	WorkerTripLength	10.80	0.43
tblTripsAndVMT	WorkerTripLength	10.80	0.43
tblTripsAndVMT	WorkerTripLength	10.80	0.43
tblTripsAndVMT	WorkerTripLength	10.80	0.43
tblTripsAndVMT	WorkerTripLength	10.80	0.43
tblVehicleTrips	CC_TL	7.30	0.43
tblVehicleTrips	CNW_TL	7.30	0.43
tblVehicleTrips	CW_TL	9.50	0.43

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

tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	1.74	1.19
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	1.74	1.19
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	1.74	1.19

# 2.0 Emissions Summary

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

## 2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/e	day							lb/d	day		
2022	44.5306	39.2309	32.8352	0.0629	19.6648	1.6358	21.2777	10.1046	1.5050	11.5884	0.0000	6,097.626 4	6,097.626 4	1.9480	0.0497	6,150.303 9
Maximum	44.5306	39.2309	32.8352	0.0629	19.6648	1.6358	21.2777	10.1046	1.5050	11.5884	0.0000	6,097.626 4	6,097.626 4	1.9480	0.0497	6,150.303 9

# Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/o	day							lb/c	day		
2022	44.5306	39.2309	32.8352	0.0629	8.8535	1.6358	10.4663	4.5482	1.5050	6.0321	0.0000	6,097.626 4	6,097.626 4	1.9480	0.0497	6,150.303 9
Maximum	44.5306	39.2309	32.8352	0.0629	8.8535	1.6358	10.4663	4.5482	1.5050	6.0321	0.0000	6,097.626 4	6,097.626 4	1.9480	0.0497	6,150.303 9

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	54.98	0.00	50.81	54.99	0.00	47.95	0.00	0.00	0.00	0.00	0.00	0.00

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

# 2.2 Overall Operational

### Unmitigated Operational

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Area	3.9686	3.4000e- 004	0.0370	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0793	0.0793	2.1000e- 004		0.0845
Energy	0.0900	0.8178	0.6870	4.9100e- 003		0.0622	0.0622		0.0622	0.0622		981.3699	981.3699	0.0188	0.0180	987.2017
Mobile	0.3620	0.1119	1.0899	8.8000e- 004	0.0660	1.0900e- 003	0.0671	0.0175	1.0000e- 003	0.0185		89.2635	89.2635	0.0237	0.0133	93.8204
Total	4.4206	0.9300	1.8139	5.7900e- 003	0.0660	0.0634	0.1294	0.0175	0.0633	0.0808		1,070.712 7	1,070.712 7	0.0427	0.0313	1,081.106 6

#### Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Area	3.9686	3.4000e- 004	0.0370	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0793	0.0793	2.1000e- 004		0.0845
Energy	0.0900	0.8178	0.6870	4.9100e- 003		0.0622	0.0622		0.0622	0.0622		981.3699	981.3699	0.0188	0.0180	987.2017
Mobile	0.3620	0.1119	1.0899	8.8000e- 004	0.0660	1.0900e- 003	0.0671	0.0175	1.0000e- 003	0.0185		89.2635	89.2635	0.0237	0.0133	93.8204
Total	4.4206	0.9300	1.8139	5.7900e- 003	0.0660	0.0634	0.1294	0.0175	0.0633	0.0808		1,070.712 7	1,070.712 7	0.0427	0.0313	1,081.106 6

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

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

# **3.0 Construction Detail**

#### **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/3/2022	1/14/2022	5	10	
2	Grading	Grading	1/15/2022	2/25/2022	5	30	
3	Building Construction	Building Construction	2/26/2022	12/4/2022	5	200	Adjusted to match applicant- provided schedule
4	Paving	Paving	2/26/2022	3/25/2022	5	20	
5	Architectural Coating	Architectural Coating	12/5/2022	12/30/2022	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 5.33

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 255,015; Non-Residential Outdoor: 85,005; Striped Parking Area: 13,931 (Architectural Coating – sqft)

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48

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

Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

#### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	44.00	0.43	0.43	0.43	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	516.00	0.43	0.43	0.43	LD_Mix	HDT_Mix	HHDT
Building Construction	9	188.00	73.00	18.00	0.43	0.43	0.43	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	4.00	12.00	0.43	0.43	0.43	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	38.00	4.00	2.00	0.43	0.43	0.43	LD_Mix	HDT_Mix	HHDT

#### **3.1 Mitigation Measures Construction**

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

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

# 3.2 Site Preparation - 2022

## **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	lay		
Fugitive Dust		1 1 1			19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.061 9	3,686.061 9	1.1922		3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	19.6570	1.6126	21.2696	10.1025	1.4836	11.5860		3,686.061 9	3,686.061 9	1.1922		3,715.865 5

#### Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	5.4900e- 003	0.0960	0.0690	1.8000e- 004	1.7500e- 003	2.0000e- 004	1.9500e- 003	4.9000e- 004	2.0000e- 004	6.8000e- 004		19.4661	19.4661	3.0000e- 004	3.0600e- 003	20.3858
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0380	0.0109	0.1034	9.0000e- 005	6.0600e- 003	1.2000e- 004	6.1700e- 003	1.6300e- 003	1.1000e- 004	1.7400e- 003		9.1091	9.1091	2.3200e- 003	1.2500e- 003	9.5384
Total	0.0435	0.1069	0.1724	2.7000e- 004	7.8100e- 003	3.2000e- 004	8.1200e- 003	2.1200e- 003	3.1000e- 004	2.4200e- 003		28.5752	28.5752	2.6200e- 003	4.3100e- 003	29.9242

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

# 3.2 Site Preparation - 2022

## **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Fugitive Dust		, , ,			8.8457	0.0000	8.8457	4.5461	0.0000	4.5461			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.061 9	3,686.061 9	1.1922		3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	8.8457	1.6126	10.4582	4.5461	1.4836	6.0297	0.0000	3,686.061 9	3,686.061 9	1.1922		3,715.865 5

#### **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	5.4900e- 003	0.0960	0.0690	1.8000e- 004	1.7500e- 003	2.0000e- 004	1.9500e- 003	4.9000e- 004	2.0000e- 004	6.8000e- 004		19.4661	19.4661	3.0000e- 004	3.0600e- 003	20.3858
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0380	0.0109	0.1034	9.0000e- 005	6.0600e- 003	1.2000e- 004	6.1700e- 003	1.6300e- 003	1.1000e- 004	1.7400e- 003		9.1091	9.1091	2.3200e- 003	1.2500e- 003	9.5384
Total	0.0435	0.1069	0.1724	2.7000e- 004	7.8100e- 003	3.2000e- 004	8.1200e- 003	2.1200e- 003	3.1000e- 004	2.4200e- 003		28.5752	28.5752	2.6200e- 003	4.3100e- 003	29.9242

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

# 3.3 Grading - 2022

**Unmitigated Construction On-Site** 

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/d	lay		
Fugitive Dust					9.2187	0.0000	9.2187	3.6560	0.0000	3.6560			0.0000		, , ,	0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.410 5	6,011.410 5	1.9442	, , ,	6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	9.2187	1.6349	10.8536	3.6560	1.5041	5.1601		6,011.410 5	6,011.410 5	1.9442		6,060.015 8

#### **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.0215	0.3753	0.2699	7.2000e- 004	6.8400e- 003	8.0000e- 004	7.6400e- 003	1.9100e- 003	7.6000e- 004	2.6700e- 003		76.0947	76.0947	1.1700e- 003	0.0120	79.6899
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0422	0.0121	0.1149	1.0000e- 004	6.7300e- 003	1.3000e- 004	6.8600e- 003	1.8100e- 003	1.2000e- 004	1.9300e- 003		10.1212	10.1212	2.5800e- 003	1.3800e- 003	10.5982
Total	0.0637	0.3874	0.3848	8.2000e- 004	0.0136	9.3000e- 004	0.0145	3.7200e- 003	8.8000e- 004	4.6000e- 003		86.2159	86.2159	3.7500e- 003	0.0134	90.2881

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

# 3.3 Grading - 2022

**Mitigated Construction On-Site** 

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Fugitive Dust		, , ,			4.1484	0.0000	4.1484	1.6452	0.0000	1.6452			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349	1 1 1	1.5041	1.5041	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	4.1484	1.6349	5.7833	1.6452	1.5041	3.1493	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.0215	0.3753	0.2699	7.2000e- 004	6.8400e- 003	8.0000e- 004	7.6400e- 003	1.9100e- 003	7.6000e- 004	2.6700e- 003		76.0947	76.0947	1.1700e- 003	0.0120	79.6899
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0422	0.0121	0.1149	1.0000e- 004	6.7300e- 003	1.3000e- 004	6.8600e- 003	1.8100e- 003	1.2000e- 004	1.9300e- 003		10.1212	10.1212	2.5800e- 003	1.3800e- 003	10.5982
Total	0.0637	0.3874	0.3848	8.2000e- 004	0.0136	9.3000e- 004	0.0145	3.7200e- 003	8.8000e- 004	4.6000e- 003		86.2159	86.2159	3.7500e- 003	0.0134	90.2881

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

# 3.4 Building Construction - 2022

# **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/d	day		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090	1 1 1	0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

#### Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Hauling	1.1000e- 004	1.9600e- 003	1.4100e- 003	0.0000	4.0000e- 005	0.0000	4.0000e- 005	1.0000e- 005	0.0000	1.0000e- 005		0.3982	0.3982	1.0000e- 005	6.0000e- 005	0.4170
Vendor	0.0567	1.0510	0.6775	2.0400e- 003	0.0310	3.3500e- 003	0.0343	9.1100e- 003	3.2000e- 003	0.0123		215.5723	215.5723	3.4400e- 003	0.0334	225.5980
Worker	0.3969	0.1133	1.0798	9.4000e- 004	0.0633	1.2100e- 003	0.0645	0.0170	1.1200e- 003	0.0181		95.1394	95.1394	0.0242	0.0130	99.6229
Total	0.4537	1.1663	1.7586	2.9800e- 003	0.0943	4.5600e- 003	0.0988	0.0261	4.3200e- 003	0.0305		311.1099	311.1099	0.0277	0.0464	325.6379

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

# 3.4 Building Construction - 2022

## **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090	- 	0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

#### **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	1.1000e- 004	1.9600e- 003	1.4100e- 003	0.0000	4.0000e- 005	0.0000	4.0000e- 005	1.0000e- 005	0.0000	1.0000e- 005		0.3982	0.3982	1.0000e- 005	6.0000e- 005	0.4170
Vendor	0.0567	1.0510	0.6775	2.0400e- 003	0.0310	3.3500e- 003	0.0343	9.1100e- 003	3.2000e- 003	0.0123		215.5723	215.5723	3.4400e- 003	0.0334	225.5980
Worker	0.3969	0.1133	1.0798	9.4000e- 004	0.0633	1.2100e- 003	0.0645	0.0170	1.1200e- 003	0.0181		95.1394	95.1394	0.0242	0.0130	99.6229
Total	0.4537	1.1663	1.7586	2.9800e- 003	0.0943	4.5600e- 003	0.0988	0.0261	4.3200e- 003	0.0305		311.1099	311.1099	0.0277	0.0464	325.6379

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

# 3.5 Paving - 2022

**Unmitigated Construction On-Site** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.5725	1				0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.6753	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/o	day		
Hauling	7.5000e- 004	0.0131	9.4100e- 003	3.0000e- 005	2.4000e- 004	3.0000e- 005	2.7000e- 004	7.0000e- 005	3.0000e- 005	9.0000e- 005		2.6545	2.6545	4.0000e- 005	4.2000e- 004	2.7799
Vendor	3.1100e- 003	0.0576	0.0371	1.1000e- 004	1.7000e- 003	1.8000e- 004	1.8800e- 003	5.0000e- 004	1.8000e- 004	6.7000e- 004		11.8122	11.8122	1.9000e- 004	1.8300e- 003	12.3615
Worker	0.0317	9.0400e- 003	0.0862	8.0000e- 005	5.0500e- 003	1.0000e- 004	5.1400e- 003	1.3600e- 003	9.0000e- 005	1.4500e- 003		7.5909	7.5909	1.9300e- 003	1.0400e- 003	7.9486
Total	0.0355	0.0797	0.1327	2.2000e- 004	6.9900e- 003	3.1000e- 004	7.2900e- 003	1.9300e- 003	3.0000e- 004	2.2100e- 003		22.0576	22.0576	2.1600e- 003	3.2900e- 003	23.0901

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

# 3.5 Paving - 2022

## **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.5725					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.6753	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.660 3	2,207.660 3	0.7140		2,225.510 4

#### **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	7.5000e- 004	0.0131	9.4100e- 003	3.0000e- 005	2.4000e- 004	3.0000e- 005	2.7000e- 004	7.0000e- 005	3.0000e- 005	9.0000e- 005		2.6545	2.6545	4.0000e- 005	4.2000e- 004	2.7799
Vendor	3.1100e- 003	0.0576	0.0371	1.1000e- 004	1.7000e- 003	1.8000e- 004	1.8800e- 003	5.0000e- 004	1.8000e- 004	6.7000e- 004		11.8122	11.8122	1.9000e- 004	1.8300e- 003	12.3615
Worker	0.0317	9.0400e- 003	0.0862	8.0000e- 005	5.0500e- 003	1.0000e- 004	5.1400e- 003	1.3600e- 003	9.0000e- 005	1.4500e- 003		7.5909	7.5909	1.9300e- 003	1.0400e- 003	7.9486
Total	0.0355	0.0797	0.1327	2.2000e- 004	6.9900e- 003	3.1000e- 004	7.2900e- 003	1.9300e- 003	3.0000e- 004	2.2100e- 003		22.0576	22.0576	2.1600e- 003	3.2900e- 003	23.0901

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

# 3.6 Architectural Coating - 2022

## **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Archit. Coating	44.2426					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e- 003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	44.4471	1.4085	1.8136	2.9700e- 003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

#### **Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/e	day		
Hauling	1.2000e- 004	2.1800e- 003	1.5700e- 003	0.0000	4.0000e- 005	0.0000	4.0000e- 005	1.0000e- 005	0.0000	2.0000e- 005		0.4424	0.4424	1.0000e- 005	7.0000e- 005	0.4633
Vendor	3.1100e- 003	0.0576	0.0371	1.1000e- 004	1.7000e- 003	1.8000e- 004	1.8800e- 003	5.0000e- 004	1.8000e- 004	6.7000e- 004		11.8122	11.8122	1.9000e- 004	1.8300e- 003	12.3615
Worker	0.0802	0.0229	0.2183	1.9000e- 004	0.0128	2.5000e- 004	0.0130	3.4400e- 003	2.3000e- 004	3.6700e- 003		19.2303	19.2303	4.9000e- 003	2.6300e- 003	20.1366
Total	0.0835	0.0827	0.2569	3.0000e- 004	0.0145	4.3000e- 004	0.0150	3.9500e- 003	4.1000e- 004	4.3600e- 003		31.4849	31.4849	5.1000e- 003	4.5300e- 003	32.9614

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

# 3.6 Architectural Coating - 2022

#### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Archit. Coating	44.2426	, , ,				0.0000	0.0000	1	0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e- 003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	44.4471	1.4085	1.8136	2.9700e- 003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062

#### **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	1.2000e- 004	2.1800e- 003	1.5700e- 003	0.0000	4.0000e- 005	0.0000	4.0000e- 005	1.0000e- 005	0.0000	2.0000e- 005		0.4424	0.4424	1.0000e- 005	7.0000e- 005	0.4633
Vendor	3.1100e- 003	0.0576	0.0371	1.1000e- 004	1.7000e- 003	1.8000e- 004	1.8800e- 003	5.0000e- 004	1.8000e- 004	6.7000e- 004		11.8122	11.8122	1.9000e- 004	1.8300e- 003	12.3615
Worker	0.0802	0.0229	0.2183	1.9000e- 004	0.0128	2.5000e- 004	0.0130	3.4400e- 003	2.3000e- 004	3.6700e- 003		19.2303	19.2303	4.9000e- 003	2.6300e- 003	20.1366
Total	0.0835	0.0827	0.2569	3.0000e- 004	0.0145	4.3000e- 004	0.0150	3.9500e- 003	4.1000e- 004	4.3600e- 003		31.4849	31.4849	5.1000e- 003	4.5300e- 003	32.9614

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

# 4.0 Operational Detail - Mobile

## 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Mitigated	0.3620	0.1119	1.0899	8.8000e- 004	0.0660	1.0900e- 003	0.0671	0.0175	1.0000e- 003	0.0185		89.2635	89.2635	0.0237	0.0133	93.8204
Unmitigated	0.3620	0.1119	1.0899	8.8000e- 004	0.0660	1.0900e- 003	0.0671	0.0175	1.0000e- 003	0.0185		89.2635	89.2635	0.0237	0.0133	93.8204

## 4.2 Trip Summary Information

	Aver	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	202.00	202.00	202.00	31,617	31,617
Total	202.00	202.00	202.00	31,617	31,617

# 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by	
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

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

		Miles			Trip %		Trip Purpose %					
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by			
Unrefrigerated Warehouse-No	0.43	0.43	0.43	59.00	0.00	41.00	100	0	0			

# 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090
Other Non-Asphalt Surfaces	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090
Parking Lot	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090
Unrefrigerated Warehouse-No Rail	0.566440	0.058900	0.195420	0.179240	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

# 5.0 Energy Detail

Historical Energy Use: N

# 5.1 Mitigation Measures Energy

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day												lb/c	lay		
NaturalGas Mitigated	0.0900	0.8178	0.6870	4.9100e- 003		0.0622	0.0622		0.0622	0.0622		981.3699	981.3699	0.0188	0.0180	987.2017
NaturalGas Unmitigated	0.0900	0.8178	0.6870	4.9100e- 003		0.0622	0.0622		0.0622	0.0622		981.3699	981.3699	0.0188	0.0180	987.2017

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

# 5.2 Energy by Land Use - NaturalGas

### **Unmitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e			
Land Use	kBTU/yr	lb/day											lb/day							
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000			
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000			
Unrefrigerated Warehouse-No Rail	8341.64	0.0900	0.8178	0.6870	4.9100e- 003		0.0622	0.0622		0.0622	0.0622		981.3699	981.3699	0.0188	0.0180	987.2017			
Total		0.0900	0.8178	0.6870	4.9100e- 003		0.0622	0.0622		0.0622	0.0622		981.3699	981.3699	0.0188	0.0180	987.2017			

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

# 5.2 Energy by Land Use - NaturalGas

#### Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e			
Land Use	kBTU/yr	lb/day											lb/day							
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000			
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000			
Unrefrigerated Warehouse-No Rail	8.34164	0.0900	0.8178	0.6870	4.9100e- 003		0.0622	0.0622		0.0622	0.0622		981.3699	981.3699	0.0188	0.0180	987.2017			
Total		0.0900	0.8178	0.6870	4.9100e- 003		0.0622	0.0622		0.0622	0.0622		981.3699	981.3699	0.0188	0.0180	987.2017			

# 6.0 Area Detail

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Mitigated	3.9686	3.4000e- 004	0.0370	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0793	0.0793	2.1000e- 004		0.0845
Unmitigated	3.9686	3.4000e- 004	0.0370	0.0000		1.3000e- 004	1.3000e- 004	 - - -	1.3000e- 004	1.3000e- 004		0.0793	0.0793	2.1000e- 004		0.0845

# 6.2 Area by SubCategory

**Unmitigated** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day								lb/day							
Architectural Coating	0.2424					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.7227					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.4300e- 003	3.4000e- 004	0.0370	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0793	0.0793	2.1000e- 004		0.0845
Total	3.9686	3.4000e- 004	0.0370	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0793	0.0793	2.1000e- 004		0.0845

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

## 6.2 Area by SubCategory

### Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/e	day					lb/day					
Architectural Coating	0.2424					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.7227					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.4300e- 003	3.4000e- 004	0.0370	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0793	0.0793	2.1000e- 004		0.0845
Total	3.9686	3.4000e- 004	0.0370	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0793	0.0793	2.1000e- 004		0.0845

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

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

### 8.0 Waste Detail

#### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

# **10.0 Stationary Equipment**

### Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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### **Boilers**

Equipment Type Number Heat Input/Day Heat Input/Year Boiler Rating Fuel Type	Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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#### **User Defined Equipment**

Equipment Type

Number

## **11.0 Vegetation**

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

Home Ave Warehouse Project - Construction & Operations (Autos + Building) - Localized Assessment Fresno County, Winter

## **1.0 Project Characteristics**

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	170.00	1000sqft	3.90	170,000.00	0
Other Non-Asphalt Surfaces	0.96	Acre	0.96	41,817.60	0
Parking Lot	190.36	1000sqft	4.37	190,361.00	0
City Park	1.02	Acre	1.02	44,349.00	0

### **1.2 Other Project Characteristics**

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			Operational Year	2023
Utility Company	Pacific Gas and E	Electric Company			
CO2 Intensity (Ib/MWhr)	203.98	CH4 Intensity (Ib/MWhr)	0.033	N2O Intensity (Ib/MWhr)	0.004

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Localized Screening Analysis - On-site Emissions Area, Building Operations, and Passenger Vehicle Operations - 2023 Unmitigated construction

Land Use - Up to 170,000-square-foot building; parking up to 190,361 sq ft; landscaping ~44,349 sq ft 10.25-acre site

Construction Phase - Construction Start Date: January 2022 Construction Duration: 12 months

Off-road Equipment - CalEEmod default amounts + hours/day retained

These estimates remain appropriate, as the building construction would include tilt-up construction

Trips and VMT - Trip lengths for construction trips updated to 0.43 mile to account for on-site emissions from mobile sources.

Grading - Net of 4k cubic yards of cut to be export (12k c. y. fill & 16k c.y. cut)

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

Architectural Coating - SJVAPCD Rule 4601 Architectural Coatings

Vehicle Trips - Passenger car trip generation rate

202 daily passenger trips

Trip lengths updated to 0.43 mile to account for on-site emissions from mobile sources.

Road Dust -

Area Coating - SJVAPCD Rule 4601 Architectural Coatings

Construction Off-road Equipment Mitigation - Compliance with SJVAPCD Regulation VIII

Water Mitigation - Calgreen Code and MWELO water conservation compliance

Waste Mitigation - CalRecycle 75% diversion mandate

Fleet Mix - Passenger vehicles consisting of LDA, LDT1, LDT2, and MDV Adjusted based on the 2023 operational year Fresno County fleet mix

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	50
tblAreaCoating	Area_EF_Nonresidential_Interior	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	300.00	200.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.51	0.57
tblFleetMix	LDT1	0.05	0.06
tblFleetMix	LDT2	0.18	0.20
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.0060e-003	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.16	0.18
tblFleetMix	МН	3.0900e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	OBUS	7.1700e-004	0.00
tblFleetMix	SBUS	1.5290e-003	0.00

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

tblFleetMix	UBUS	2.9100e-004	0.00
tblGrading	MaterialExported	0.00	4,000.00
tblLandUse	LandUseSquareFeet	190,360.00	190,361.00
tblLandUse	LandUseSquareFeet	44,431.20	44,349.00
tblTripsAndVMT	HaulingTripLength	20.00	0.43
tblTripsAndVMT	HaulingTripLength	20.00	0.43
tblTripsAndVMT	HaulingTripLength	20.00	0.43
tblTripsAndVMT	HaulingTripLength	20.00	0.43
tblTripsAndVMT	HaulingTripLength	20.00	0.43
tblTripsAndVMT	HaulingTripNumber	0.00	44.00
tblTripsAndVMT	HaulingTripNumber	500.00	516.00
tblTripsAndVMT	HaulingTripNumber	0.00	18.00
tblTripsAndVMT	HaulingTripNumber	0.00	12.00
tblTripsAndVMT	HaulingTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripLength	7.30	0.43
tblTripsAndVMT	VendorTripLength	7.30	0.43
tblTripsAndVMT	VendorTripLength	7.30	0.43
tblTripsAndVMT	VendorTripLength	7.30	0.43
tblTripsAndVMT	VendorTripLength	7.30	0.43
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	WorkerTripLength	10.80	0.43
tblTripsAndVMT	WorkerTripLength	10.80	0.43
tblTripsAndVMT	WorkerTripLength	10.80	0.43
tblTripsAndVMT	WorkerTripLength	10.80	0.43
tblTripsAndVMT	WorkerTripLength	10.80	0.43
tblVehicleTrips	CC_TL	7.30	0.43
tblVehicleTrips	CNW_TL	7.30	0.43
tblVehicleTrips	CW_TL	9.50	0.43

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

tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	1.74	1.19
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	1.74	1.19
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	1.74	1.19

# 2.0 Emissions Summary

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

### 2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day									lb/day						
2022	44.5045	39.2587	33.2458	0.0629	19.6648	1.6359	21.2777	10.1046	1.5050	11.5885	0.0000	6,097.589 6	6,097.589 6	1.9488	0.0517	6,150.372 4
Maximum	44.5045	39.2587	33.2458	0.0629	19.6648	1.6359	21.2777	10.1046	1.5050	11.5885	0.0000	6,097.589 6	6,097.589 6	1.9488	0.0517	6,150.372 4

## Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/e	day							lb/c	day		
2022	44.5045	39.2587	33.2458	0.0629	8.8535	1.6359	10.4664	4.5482	1.5050	6.0321	0.0000	6,097.589 6	6,097.589 6	1.9488	0.0517	6,150.372 4
Maximum	44.5045	39.2587	33.2458	0.0629	8.8535	1.6359	10.4664	4.5482	1.5050	6.0321	0.0000	6,097.589 6	6,097.589 6	1.9488	0.0517	6,150.372 4

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	54.98	0.00	50.81	54.99	0.00	47.95	0.00	0.00	0.00	0.00	0.00	0.00

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

## 2.2 Overall Operational

### Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Area	3.9686	3.4000e- 004	0.0370	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0793	0.0793	2.1000e- 004		0.0845
Energy	0.0900	0.8178	0.6870	4.9100e- 003		0.0622	0.0622		0.0622	0.0622		981.3699	981.3699	0.0188	0.0180	987.2017
Mobile	0.2609	0.1317	1.4747	8.2000e- 004	0.0660	1.0900e- 003	0.0671	0.0175	1.0000e- 003	0.0185		83.2796	83.2796	0.0322	0.0149	88.5319
Total	4.3194	0.9498	2.1987	5.7300e- 003	0.0660	0.0634	0.1294	0.0175	0.0633	0.0808		1,064.728 8	1,064.728 8	0.0512	0.0329	1,075.818 1

### Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Area	3.9686	3.4000e- 004	0.0370	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0793	0.0793	2.1000e- 004		0.0845
Energy	0.0900	0.8178	0.6870	4.9100e- 003		0.0622	0.0622		0.0622	0.0622		981.3699	981.3699	0.0188	0.0180	987.2017
Mobile	0.2609	0.1317	1.4747	8.2000e- 004	0.0660	1.0900e- 003	0.0671	0.0175	1.0000e- 003	0.0185		83.2796	83.2796	0.0322	0.0149	88.5319
Total	4.3194	0.9498	2.1987	5.7300e- 003	0.0660	0.0634	0.1294	0.0175	0.0633	0.0808		1,064.728 8	1,064.728 8	0.0512	0.0329	1,075.818 1

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

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

# **3.0 Construction Detail**

#### **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/3/2022	1/14/2022	5	10	
2	Grading	Grading	1/15/2022	2/25/2022	5	30	
3	Building Construction	Building Construction	2/26/2022	12/4/2022	5	200	Adjusted to match applicant- provided schedule
4	Paving	Paving	2/26/2022	3/25/2022	5	20	
5	Architectural Coating	Architectural Coating	12/5/2022	12/30/2022	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 5.33

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 255,015; Non-Residential Outdoor: 85,005; Striped Parking Area: 13,931 (Architectural Coating – sqft)

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48

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

Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	44.00	0.43	0.43	0.43	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	516.00	0.43	0.43	0.43	LD_Mix	HDT_Mix	HHDT
Building Construction	9	188.00	73.00	18.00	0.43	0.43	0.43	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	4.00	12.00	0.43	0.43	0.43	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	38.00	4.00	2.00	0.43	0.43	0.43	LD_Mix	HDT_Mix	HHDT

#### **3.1 Mitigation Measures Construction**

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

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

# 3.2 Site Preparation - 2022

## **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.061 9	3,686.061 9	1.1922		3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	19.6570	1.6126	21.2696	10.1025	1.4836	11.5860		3,686.061 9	3,686.061 9	1.1922		3,715.865 5

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	4.8900e- 003	0.1026	0.0721	1.9000e- 004	1.7500e- 003	2.1000e- 004	1.9600e- 003	4.9000e- 004	2.0000e- 004	6.9000e- 004		19.6548	19.6548	2.7000e- 004	3.0900e- 003	20.5826
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0258	0.0128	0.1356	8.0000e- 005	6.0600e- 003	1.2000e- 004	6.1700e- 003	1.6300e- 003	1.1000e- 004	1.7400e- 003		8.4121	8.4121	3.1500e- 003	1.4000e- 003	8.9075
Total	0.0307	0.1154	0.2077	2.7000e- 004	7.8100e- 003	3.3000e- 004	8.1300e- 003	2.1200e- 003	3.1000e- 004	2.4300e- 003		28.0669	28.0669	3.4200e- 003	4.4900e- 003	29.4901

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

# 3.2 Site Preparation - 2022

### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Fugitive Dust		, , ,			8.8457	0.0000	8.8457	4.5461	0.0000	4.5461			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.061 9	3,686.061 9	1.1922		3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	8.8457	1.6126	10.4582	4.5461	1.4836	6.0297	0.0000	3,686.061 9	3,686.061 9	1.1922		3,715.865 5

### **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	4.8900e- 003	0.1026	0.0721	1.9000e- 004	1.7500e- 003	2.1000e- 004	1.9600e- 003	4.9000e- 004	2.0000e- 004	6.9000e- 004		19.6548	19.6548	2.7000e- 004	3.0900e- 003	20.5826
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0258	0.0128	0.1356	8.0000e- 005	6.0600e- 003	1.2000e- 004	6.1700e- 003	1.6300e- 003	1.1000e- 004	1.7400e- 003		8.4121	8.4121	3.1500e- 003	1.4000e- 003	8.9075
Total	0.0307	0.1154	0.2077	2.7000e- 004	7.8100e- 003	3.3000e- 004	8.1300e- 003	2.1200e- 003	3.1000e- 004	2.4300e- 003		28.0669	28.0669	3.4200e- 003	4.4900e- 003	29.4901

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

# 3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/d	lay		
Fugitive Dust					9.2187	0.0000	9.2187	3.6560	0.0000	3.6560			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.410 5	6,011.410 5	1.9442	, , ,	6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	9.2187	1.6349	10.8536	3.6560	1.5041	5.1601		6,011.410 5	6,011.410 5	1.9442		6,060.015 8

#### **Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Hauling	0.0191	0.4010	0.2819	7.2000e- 004	6.8400e- 003	8.3000e- 004	7.6700e- 003	1.9100e- 003	8.0000e- 004	2.7000e- 003		76.8323	76.8323	1.0600e- 003	0.0121	80.4594
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0286	0.0142	0.1506	9.0000e- 005	6.7300e- 003	1.3000e- 004	6.8600e- 003	1.8100e- 003	1.2000e- 004	1.9300e- 003		9.3467	9.3467	3.5000e- 003	1.5500e- 003	9.8972
Total	0.0478	0.4152	0.4325	8.1000e- 004	0.0136	9.6000e- 004	0.0145	3.7200e- 003	9.2000e- 004	4.6300e- 003		86.1791	86.1791	4.5600e- 003	0.0136	90.3566

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

# 3.3 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Fugitive Dust		, , ,			4.1484	0.0000	4.1484	1.6452	0.0000	1.6452			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349	1 1 1	1.5041	1.5041	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	4.1484	1.6349	5.7833	1.6452	1.5041	3.1493	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8

### **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Hauling	0.0191	0.4010	0.2819	7.2000e- 004	6.8400e- 003	8.3000e- 004	7.6700e- 003	1.9100e- 003	8.0000e- 004	2.7000e- 003		76.8323	76.8323	1.0600e- 003	0.0121	80.4594
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0286	0.0142	0.1506	9.0000e- 005	6.7300e- 003	1.3000e- 004	6.8600e- 003	1.8100e- 003	1.2000e- 004	1.9300e- 003		9.3467	9.3467	3.5000e- 003	1.5500e- 003	9.8972
Total	0.0478	0.4152	0.4325	8.1000e- 004	0.0136	9.6000e- 004	0.0145	3.7200e- 003	9.2000e- 004	4.6300e- 003		86.1791	86.1791	4.5600e- 003	0.0136	90.3566

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

# 3.4 Building Construction - 2022

## **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090	1 1 1	0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

### Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Hauling	1.0000e- 004	2.1000e- 003	1.4800e- 003	0.0000	4.0000e- 005	0.0000	4.0000e- 005	1.0000e- 005	0.0000	1.0000e- 005		0.4020	0.4020	1.0000e- 005	6.0000e- 005	0.4210
Vendor	0.0517	1.1122	0.7224	2.0500e- 003	0.0310	3.4600e- 003	0.0344	9.1100e- 003	3.3100e- 003	0.0124		217.0037	217.0037	3.3000e- 003	0.0336	227.1060
Worker	0.2691	0.1335	1.4157	8.7000e- 004	0.0633	1.2100e- 003	0.0645	0.0170	1.1200e- 003	0.0181		87.8594	87.8594	0.0329	0.0146	93.0334
Total	0.3209	1.2478	2.1396	2.9200e- 003	0.0943	4.6700e- 003	0.0989	0.0261	4.4300e- 003	0.0306		305.2651	305.2651	0.0362	0.0483	320.5604

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

# 3.4 Building Construction - 2022

### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090	- 	0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

### **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	1.0000e- 004	2.1000e- 003	1.4800e- 003	0.0000	4.0000e- 005	0.0000	4.0000e- 005	1.0000e- 005	0.0000	1.0000e- 005		0.4020	0.4020	1.0000e- 005	6.0000e- 005	0.4210
Vendor	0.0517	1.1122	0.7224	2.0500e- 003	0.0310	3.4600e- 003	0.0344	9.1100e- 003	3.3100e- 003	0.0124		217.0037	217.0037	3.3000e- 003	0.0336	227.1060
Worker	0.2691	0.1335	1.4157	8.7000e- 004	0.0633	1.2100e- 003	0.0645	0.0170	1.1200e- 003	0.0181		87.8594	87.8594	0.0329	0.0146	93.0334
Total	0.3209	1.2478	2.1396	2.9200e- 003	0.0943	4.6700e- 003	0.0989	0.0261	4.4300e- 003	0.0306		305.2651	305.2651	0.0362	0.0483	320.5604

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

## 3.5 Paving - 2022

**Unmitigated Construction On-Site** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.5725	1	1 1 1 1 1			0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.6753	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	6.7000e- 004	0.0140	9.8300e- 003	3.0000e- 005	2.4000e- 004	3.0000e- 005	2.7000e- 004	7.0000e- 005	3.0000e- 005	9.0000e- 005		2.6802	2.6802	4.0000e- 005	4.2000e- 004	2.8067
Vendor	2.8300e- 003	0.0609	0.0396	1.1000e- 004	1.7000e- 003	1.9000e- 004	1.8900e- 003	5.0000e- 004	1.8000e- 004	6.8000e- 004		11.8906	11.8906	1.8000e- 004	1.8400e- 003	12.4442
Worker	0.0215	0.0107	0.1130	7.0000e- 005	5.0500e- 003	1.0000e- 004	5.1400e- 003	1.3600e- 003	9.0000e- 005	1.4500e- 003		7.0101	7.0101	2.6300e- 003	1.1600e- 003	7.4229
Total	0.0250	0.0856	0.1624	2.1000e- 004	6.9900e- 003	3.2000e- 004	7.3000e- 003	1.9300e- 003	3.0000e- 004	2.2200e- 003		21.5809	21.5809	2.8500e- 003	3.4200e- 003	22.6738

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

## 3.5 Paving - 2022

### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	lay		
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.5725	1 1 1 1				0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.6753	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.660 3	2,207.660 3	0.7140		2,225.510 4

### **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	6.7000e- 004	0.0140	9.8300e- 003	3.0000e- 005	2.4000e- 004	3.0000e- 005	2.7000e- 004	7.0000e- 005	3.0000e- 005	9.0000e- 005		2.6802	2.6802	4.0000e- 005	4.2000e- 004	2.8067
Vendor	2.8300e- 003	0.0609	0.0396	1.1000e- 004	1.7000e- 003	1.9000e- 004	1.8900e- 003	5.0000e- 004	1.8000e- 004	6.8000e- 004		11.8906	11.8906	1.8000e- 004	1.8400e- 003	12.4442
Worker	0.0215	0.0107	0.1130	7.0000e- 005	5.0500e- 003	1.0000e- 004	5.1400e- 003	1.3600e- 003	9.0000e- 005	1.4500e- 003		7.0101	7.0101	2.6300e- 003	1.1600e- 003	7.4229
Total	0.0250	0.0856	0.1624	2.1000e- 004	6.9900e- 003	3.2000e- 004	7.3000e- 003	1.9300e- 003	3.0000e- 004	2.2200e- 003		21.5809	21.5809	2.8500e- 003	3.4200e- 003	22.6738

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

# 3.6 Architectural Coating - 2022

### **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	lay		
Archit. Coating	44.2426	1 1 1				0.0000	0.0000	1 1 1	0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e- 003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	44.4471	1.4085	1.8136	2.9700e- 003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/e	day		
Hauling	1.1000e- 004	2.3300e- 003	1.6400e- 003	0.0000	4.0000e- 005	0.0000	4.0000e- 005	1.0000e- 005	0.0000	2.0000e- 005		0.4467	0.4467	1.0000e- 005	7.0000e- 005	0.4678
Vendor	2.8300e- 003	0.0609	0.0396	1.1000e- 004	1.7000e- 003	1.9000e- 004	1.8900e- 003	5.0000e- 004	1.8000e- 004	6.8000e- 004		11.8906	11.8906	1.8000e- 004	1.8400e- 003	12.4442
Worker	0.0544	0.0270	0.2862	1.8000e- 004	0.0128	2.5000e- 004	0.0130	3.4400e- 003	2.3000e- 004	3.6700e- 003		17.7588	17.7588	6.6600e- 003	2.9500e- 003	18.8046
Total	0.0573	0.0903	0.3274	2.9000e- 004	0.0145	4.4000e- 004	0.0150	3.9500e- 003	4.1000e- 004	4.3700e- 003		30.0961	30.0961	6.8500e- 003	4.8600e- 003	31.7166

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

# 3.6 Architectural Coating - 2022

### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Archit. Coating	44.2426	, , ,				0.0000	0.0000	1	0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e- 003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	44.4471	1.4085	1.8136	2.9700e- 003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062

### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	1.1000e- 004	2.3300e- 003	1.6400e- 003	0.0000	4.0000e- 005	0.0000	4.0000e- 005	1.0000e- 005	0.0000	2.0000e- 005		0.4467	0.4467	1.0000e- 005	7.0000e- 005	0.4678
Vendor	2.8300e- 003	0.0609	0.0396	1.1000e- 004	1.7000e- 003	1.9000e- 004	1.8900e- 003	5.0000e- 004	1.8000e- 004	6.8000e- 004		11.8906	11.8906	1.8000e- 004	1.8400e- 003	12.4442
Worker	0.0544	0.0270	0.2862	1.8000e- 004	0.0128	2.5000e- 004	0.0130	3.4400e- 003	2.3000e- 004	3.6700e- 003		17.7588	17.7588	6.6600e- 003	2.9500e- 003	18.8046
Total	0.0573	0.0903	0.3274	2.9000e- 004	0.0145	4.4000e- 004	0.0150	3.9500e- 003	4.1000e- 004	4.3700e- 003		30.0961	30.0961	6.8500e- 003	4.8600e- 003	31.7166

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

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	lay		
Mitigated	0.2609	0.1317	1.4747	8.2000e- 004	0.0660	1.0900e- 003	0.0671	0.0175	1.0000e- 003	0.0185		83.2796	83.2796	0.0322	0.0149	88.5319
Unmitigated	0.2609	0.1317	1.4747	8.2000e- 004	0.0660	1.0900e- 003	0.0671	0.0175	1.0000e- 003	0.0185		83.2796	83.2796	0.0322	0.0149	88.5319

### 4.2 Trip Summary Information

	Aver	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	202.00	202.00	202.00	31,617	31,617
Total	202.00	202.00	202.00	31,617	31,617

# 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

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

		Miles			Trip %			Trip Purpos	se %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Unrefrigerated Warehouse-No	0.43	0.43	0.43	59.00	0.00	41.00	100	0	0

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090
Other Non-Asphalt Surfaces	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090
Parking Lot	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090
Unrefrigerated Warehouse-No Rail	0.566440	0.058900	0.195420	0.179240	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

# 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
NaturalGas Mitigated	0.0900	0.8178	0.6870	4.9100e- 003	1 1 1	0.0622	0.0622		0.0622	0.0622		981.3699	981.3699	0.0188	0.0180	987.2017
NaturalGas Unmitigated	0.0900	0.8178	0.6870	4.9100e- 003		0.0622	0.0622		0.0622	0.0622		981.3699	981.3699	0.0188	0.0180	987.2017

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

## 5.2 Energy by Land Use - NaturalGas

### **Unmitigated**

	NaturalGa s Use	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/e	day							lb/c	lay		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	8341.64	0.0900	0.8178	0.6870	4.9100e- 003		0.0622	0.0622		0.0622	0.0622		981.3699	981.3699	0.0188	0.0180	987.2017
Total		0.0900	0.8178	0.6870	4.9100e- 003		0.0622	0.0622		0.0622	0.0622		981.3699	981.3699	0.0188	0.0180	987.2017

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

## 5.2 Energy by Land Use - NaturalGas

#### Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/e	day							lb/c	lay		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	8.34164	0.0900	0.8178	0.6870	4.9100e- 003		0.0622	0.0622		0.0622	0.0622		981.3699	981.3699	0.0188	0.0180	987.2017
Total		0.0900	0.8178	0.6870	4.9100e- 003		0.0622	0.0622		0.0622	0.0622		981.3699	981.3699	0.0188	0.0180	987.2017

# 6.0 Area Detail

6.1 Mitigation Measures Area

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

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Mitigated	3.9686	3.4000e- 004	0.0370	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0793	0.0793	2.1000e- 004		0.0845
Unmitigated	3.9686	3.4000e- 004	0.0370	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0793	0.0793	2.1000e- 004		0.0845

# 6.2 Area by SubCategory

**Unmitigated** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day					lb/day					
Architectural Coating	0.2424					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.7227					0.0000	0.0000		0.0000	0.0000		 - - -	0.0000			0.0000
Landscaping	3.4300e- 003	3.4000e- 004	0.0370	0.0000		1.3000e- 004	1.3000e- 004	1	1.3000e- 004	1.3000e- 004		0.0793	0.0793	2.1000e- 004		0.0845
Total	3.9686	3.4000e- 004	0.0370	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0793	0.0793	2.1000e- 004		0.0845

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

### 6.2 Area by SubCategory

### Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/e	day							lb/d	day		
Architectural Coating	0.2424					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.7227					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.4300e- 003	3.4000e- 004	0.0370	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0793	0.0793	2.1000e- 004		0.0845
Total	3.9686	3.4000e- 004	0.0370	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0793	0.0793	2.1000e- 004		0.0845

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

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

### 8.0 Waste Detail

#### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

# **10.0 Stationary Equipment**

### Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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### **Boilers**

Equipment Type Number Heat Input/Day Heat Input/Year Boiler Rating Fuel Type	Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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#### **User Defined Equipment**

Equipment Type

Number

# **11.0 Vegetation**

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

Home Avenue Warehouse Project - Project Truck Operations (Localized Screening Analysis) Fresno County, Summer

## **1.0 Project Characteristics**

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	170.00	1000sqft	3.90	170,000.00	0
Other Non-Asphalt Surfaces	0.96	Acre	0.96	41,817.60	0
Parking Lot	190.36	1000sqft	4.37	190,361.00	0
City Park	1.02	Acre	1.02	44,349.00	0

### **1.2 Other Project Characteristics**

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			<b>Operational Year</b>	2023
Utility Company	Pacific Gas and E	Electric Company			
CO2 Intensity (Ib/MWhr)	203.98	CH4 Intensity (Ib/MWhr)	0.033	N2O Intensity (Ib/MWhr)	0.004

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Localized Screening Analysis - Truck Operations

Land Use - Up to 170,000-square-foot building; parking up to 190,361 sq ft; landscaping ~44,349 sq ft 10.25-acre site

Construction Phase - Operational truck only run - zeroed out construction parameters

Off-road Equipment - Operational truck only run - zeroed out construction parameters

Trips and VMT - Operational truck only run – zeroed out construction parameters

 $\label{eq:action} \mbox{Architectural Coating - Operational truck only run-zeroed out construction parameters}$ 

Vehicle Trips - Truck trip generation rate

Trip lengths updated to 0.43 mile to account for on-site emissions from mobile sources. On-site trip length measured in Google Earth.

Vehicle Emission Factors -

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

Vehicle Emission Factors -

- Vehicle Emission Factors -
- Consumer Products Operational truck only run zeroed out area parameters
- Area Coating Operational truck only run zeroed out area parameters
- Landscape Equipment Operational truck only run zeroed out area parameters
- Energy Use Truck only run
- Water And Wastewater Operational truck only run water and wastewater in a separate run
- Solid Waste Truck only run

Fleet Mix - Truck operational fleet mix (100% 4+ axle trucks)

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	0.00
tblArchitecturalCoating	EF_Parking	150.00	0.00
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstructionPhase	NumDays	20.00	1.00
tblConsumerProducts	ROG_EF	2.14E-05	1E-07
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	1E-10
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	1E-11
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	3.22	0.00
tblEnergyUse	NT24E	5.13	0.00
tblEnergyUse	NT24NG	1.05	0.00
tblEnergyUse	T24E	0.93	0.00
tblEnergyUse	T24NG	16.86	0.00
tblFleetMix	HHD	0.02	1.00
tblFleetMix	LDA	0.51	0.00
tblFleetMix	LDT1	0.05	0.00
tblFleetMix	LDT2	0.18	0.00

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

tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.0060e-003	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.16	0.00
tblFleetMix	МН	3.0900e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	OBUS	7.1700e-004	0.00
tblFleetMix	SBUS	1.5290e-003	0.00
tblFleetMix	UBUS	2.9100e-004	0.00
tblLandscapeEquipment	NumberSummerDays	180	1
tblLandUse	LandUseSquareFeet	190,360.00	190,361.00
tblLandUse	LandUseSquareFeet	44,431.20	44,349.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblSolidWaste	SolidWasteGenerationRate	0.09	0.00
tblSolidWaste	SolidWasteGenerationRate	159.80	0.00
tblTripsAndVMT	WorkerTripNumber	38.00	0.00
tblVehicleTrips	CC_TL	7.30	0.43
tblVehicleTrips	CNW_TL	7.30	0.43
tblVehicleTrips	CW_TL	9.50	0.43
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	1.74	0.55
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	1.74	0.55
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	1.74	0.55

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

tblWater	IndoorWaterUseRate	39,312,500.00	0.00
tblWater	OutdoorWaterUseRate	1,215,310.98	0.00

# 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

### **Unmitigated Construction**

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/r	day							lb/o	lay		
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

### **Mitigated Construction**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/e	day							lb/d	lay		
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

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

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

## 2.2 Overall Operational

### Unmitigated Operational

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Area	0.0205	3.4000e- 004	0.0370	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0793	0.0793	2.1000e- 004		0.0845
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1132	1.8879	1.5465	3.5000e- 003	0.0354	2.8300e- 003	0.0382	9.7000e- 003	2.7000e- 003	0.0124		370.9173	370.9173	6.0000e- 003	0.0583	388.4492
Total	0.1337	1.8883	1.5835	3.5000e- 003	0.0354	2.9600e- 003	0.0383	9.7000e- 003	2.8300e- 003	0.0125		370.9966	370.9966	6.2100e- 003	0.0583	388.5337

#### Mitigated Operational

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Area	0.0205	3.4000e- 004	0.0370	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0793	0.0793	2.1000e- 004		0.0845
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1132	1.8879	1.5465	3.5000e- 003	0.0354	2.8300e- 003	0.0382	9.7000e- 003	2.7000e- 003	0.0124		370.9173	370.9173	6.0000e- 003	0.0583	388.4492
Total	0.1337	1.8883	1.5835	3.5000e- 003	0.0354	2.9600e- 003	0.0383	9.7000e- 003	2.8300e- 003	0.0125		370.9966	370.9966	6.2100e- 003	0.0583	388.5337

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

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

# 3.0 Construction Detail

#### **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	1/3/2022	1/3/2022	5	1	

#### Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

#### Acres of Paving: 5.33

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 255,015; Non-Residential Outdoor: 85,005; Striped Parking Area: 13,931 (Architectural Coating – sqft)

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	0.00	78	0.48

#### Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
	Count	Number	Number	Number	Length	Length	Length	Class	Vehicle Class	Vehicle Class
Architectural Coating	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

### **3.1 Mitigation Measures Construction**

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

# 3.2 Architectural Coating - 2022

## **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Archit. Coating	0.0000					0.0000	0.0000	1 1 1	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

# 3.2 Architectural Coating - 2022

# **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Archit. Coating	0.0000	, , ,				0.0000	0.0000		0.0000	0.0000		1 1 1	0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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

# 4.0 Operational Detail - Mobile

## 4.1 Mitigation Measures Mobile

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	day							lb/c	lay		
Mitigated	0.1132	1.8879	1.5465	3.5000e- 003	0.0354	2.8300e- 003	0.0382	9.7000e- 003	2.7000e- 003	0.0124		370.9173	370.9173	6.0000e- 003	0.0583	388.4492
Unmitigated	0.1132	1.8879	1.5465	3.5000e- 003	0.0354	2.8300e- 003	0.0382	9.7000e- 003	2.7000e- 003	0.0124		370.9173	370.9173	6.0000e- 003	0.0583	388.4492

# 4.2 Trip Summary Information

	Aver	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	94.00	94.00	94.00	14,713	14,713
Total	94.00	94.00	94.00	14,713	14,713

# 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

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

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Unrefrigerated Warehouse-No	0.43	0.43	0.43	59.00	0.00	41.00	100	0	0

### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090
Other Non-Asphalt Surfaces	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090
Parking Lot	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000

# 5.0 Energy Detail

Historical Energy Use: N

# 5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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

# 5.2 Energy by Land Use - NaturalGas

## **Unmitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/e	day							lb/c	lay		
City Park	0	0.0000	0.0000	0.0000	0.0000	1 1 1	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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

# 5.2 Energy by Land Use - NaturalGas

# Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/e	day							lb/c	lay		
City Park	0	0.0000	0.0000	0.0000	0.0000	1 1 1	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

# 6.0 Area Detail

6.1 Mitigation Measures Area

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Mitigated	0.0205	3.4000e- 004	0.0370	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0793	0.0793	2.1000e- 004		0.0845
Unmitigated	0.0205	3.4000e- 004	0.0370	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0793	0.0793	2.1000e- 004		0.0845

# 6.2 Area by SubCategory

**Unmitigated** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/e	day		
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0170					0.0000	0.0000		0.0000	0.0000		 - - -	0.0000			0.0000
Landscaping	3.4300e- 003	3.4000e- 004	0.0370	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0793	0.0793	2.1000e- 004		0.0845
Total	0.0205	3.4000e- 004	0.0370	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0793	0.0793	2.1000e- 004		0.0845

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

# 6.2 Area by SubCategory

# Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/e	day							lb/d	day		
Architectural Coating	0.0000	1 1 1				0.0000	0.0000		0.0000	0.0000		1 1 1	0.0000			0.0000
Consumer Products	0.0170					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.4300e- 003	3.4000e- 004	0.0370	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0793	0.0793	2.1000e- 004		0.0845
Total	0.0205	3.4000e- 004	0.0370	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0793	0.0793	2.1000e- 004		0.0845

# 7.0 Water Detail

7.1 Mitigation Measures Water

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

## 8.0 Waste Detail

# 8.1 Mitigation Measures Waste

# 9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

# **10.0 Stationary Equipment**

## Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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## **Boilers**

Equipment Type Number Heat Input/Day Heat Input/Year Boiler Rating Fuel Type	Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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#### **User Defined Equipment**

Equipment Type

Number

# **11.0 Vegetation**

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

Home Avenue Warehouse Project - Project Truck Operations (Localized Screening Analysis) Fresno County, Winter

# **1.0 Project Characteristics**

# 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	170.00	1000sqft	3.90	170,000.00	0
Other Non-Asphalt Surfaces	0.96	Acre	0.96	41,817.60	0
Parking Lot	190.36	1000sqft	4.37	190,361.00	0
City Park	1.02	Acre	1.02	44,349.00	0

## **1.2 Other Project Characteristics**

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			<b>Operational Year</b>	2023
Utility Company	Pacific Gas and E	Electric Company			
CO2 Intensity (Ib/MWhr)	203.98	CH4 Intensity (Ib/MWhr)	0.033	N2O Intensity (Ib/MWhr)	0.004

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Localized Screening Analysis - Truck Operations

Land Use - Up to 170,000-square-foot building; parking up to 190,361 sq ft; landscaping ~44,349 sq ft 10.25-acre site

Construction Phase - Operational truck only run - zeroed out construction parameters

Off-road Equipment - Operational truck only run - zeroed out construction parameters

Trips and VMT - Operational truck only run – zeroed out construction parameters

 $\label{eq:action} \mbox{Architectural Coating - Operational truck only run-zeroed out construction parameters}$ 

Vehicle Trips - Truck trip generation rate

Trip lengths updated to 0.43 mile to account for on-site emissions from mobile sources. On-site trip length measured in Google Earth.

Vehicle Emission Factors -

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

Vehicle Emission Factors -

- Vehicle Emission Factors -
- Consumer Products Operational truck only run zeroed out area parameters
- Area Coating Operational truck only run zeroed out area parameters
- Landscape Equipment Operational truck only run zeroed out area parameters
- Energy Use Truck only run

Water And Wastewater - Operational truck only run - water and wastewater in a separate run

Solid Waste - Truck only run

Fleet Mix - Truck operational fleet mix (100% 4+ axle trucks)

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	0.00
tblArchitecturalCoating	EF_Parking	150.00	0.00
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstructionPhase	NumDays	20.00	1.00
tblConsumerProducts	ROG_EF	2.14E-05	1E-07
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	1E-10
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	1E-11
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	3.22	0.00
tblEnergyUse	NT24E	5.13	0.00
tblEnergyUse	NT24NG	1.05	0.00
tblEnergyUse	T24E	0.93	0.00
tblEnergyUse	T24NG	16.86	0.00
tblFleetMix	HHD	0.02	1.00
tblFleetMix	LDA	0.51	0.00
tblFleetMix	LDT1	0.05	0.00
tblFleetMix	LDT2	0.18	0.00

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

tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.0060e-003	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.16	0.00
tblFleetMix	МН	3.0900e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	OBUS	7.1700e-004	0.00
tblFleetMix	SBUS	1.5290e-003	0.00
tblFleetMix	UBUS	2.9100e-004	0.00
tblLandscapeEquipment	NumberSummerDays	180	1
tblLandUse	LandUseSquareFeet	190,360.00	190,361.00
tblLandUse	LandUseSquareFeet	44,431.20	44,349.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblSolidWaste	SolidWasteGenerationRate	0.09	0.00
tblSolidWaste	SolidWasteGenerationRate	159.80	0.00
tblTripsAndVMT	WorkerTripNumber	38.00	0.00
tblVehicleTrips	CC_TL	7.30	0.43
tblVehicleTrips	CNW_TL	7.30	0.43
tblVehicleTrips	CW_TL	9.50	0.43
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	1.74	0.55
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	1.74	0.55
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	1.74	0.55

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

tblWater	IndoorWaterUseRate	39,312,500.00	0.00
tblWater	OutdoorWaterUseRate	1,215,310.98	0.00

# 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

## **Unmitigated Construction**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/e	day							lb/o	day		
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

### **Mitigated Construction**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/e	day							lb/d	lay		
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

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

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

# 2.2 Overall Operational

# Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Area	0.0205	3.4000e- 004	0.0370	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0793	0.0793	2.1000e- 004		0.0845
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0985	2.0457	1.5960	3.5700e- 003	0.0354	2.9700e- 003	0.0384	9.7000e- 003	2.8500e- 003	0.0125		378.4614	378.4614	5.3200e- 003	0.0595	396.3295
Total	0.1189	2.0460	1.6330	3.5700e- 003	0.0354	3.1000e- 003	0.0385	9.7000e- 003	2.9800e- 003	0.0127		378.5407	378.5407	5.5300e- 003	0.0595	396.4140

#### Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Area	0.0205	3.4000e- 004	0.0370	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0793	0.0793	2.1000e- 004		0.0845
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0985	2.0457	1.5960	3.5700e- 003	0.0354	2.9700e- 003	0.0384	9.7000e- 003	2.8500e- 003	0.0125		378.4614	378.4614	5.3200e- 003	0.0595	396.3295
Total	0.1189	2.0460	1.6330	3.5700e- 003	0.0354	3.1000e- 003	0.0385	9.7000e- 003	2.9800e- 003	0.0127		378.5407	378.5407	5.5300e- 003	0.0595	396.4140

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

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

# 3.0 Construction Detail

#### **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	1/3/2022	1/3/2022	5	1	

#### Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

#### Acres of Paving: 5.33

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 255,015; Non-Residential Outdoor: 85,005; Striped Parking Area: 13,931 (Architectural Coating – sqft)

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	0.00	78	0.48

#### Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
	Count	Number	Number	Number	Length	Length	Length	Class	Vehicle Class	Vehicle Class
Architectural Coating	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

### **3.1 Mitigation Measures Construction**

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

# 3.2 Architectural Coating - 2022

# **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Archit. Coating	0.0000	1 1 1				0.0000	0.0000	1 1 1	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

#### **Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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

# 3.2 Architectural Coating - 2022

# **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Archit. Coating	0.0000	, , ,	1			0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

### **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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

# 4.0 Operational Detail - Mobile

# 4.1 Mitigation Measures Mobile

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Mitigated	0.0985	2.0457	1.5960	3.5700e- 003	0.0354	2.9700e- 003	0.0384	9.7000e- 003	2.8500e- 003	0.0125		378.4614	378.4614	5.3200e- 003	0.0595	396.3295
Unmitigated	0.0985	2.0457	1.5960	3.5700e- 003	0.0354	2.9700e- 003	0.0384	9.7000e- 003	2.8500e- 003	0.0125		378.4614	378.4614	5.3200e- 003	0.0595	396.3295

# 4.2 Trip Summary Information

	Aver	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	94.00	94.00	94.00	14,713	14,713
Total	94.00	94.00	94.00	14,713	14,713

# 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

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

		Miles			Trip %			Trip Purpos	se %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Unrefrigerated Warehouse-No	0.43	0.43	0.43	59.00	0.00	41.00	100	0	0

### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090
Other Non-Asphalt Surfaces	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090
Parking Lot	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000

# 5.0 Energy Detail

Historical Energy Use: N

# 5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000	· · · · · · · · · · · · · · · · · · ·	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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

# 5.2 Energy by Land Use - NaturalGas

# **Unmitigated**

	NaturalGa s Use	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/e	day							lb/d	lay		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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

# 5.2 Energy by Land Use - NaturalGas

# Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/e	day							lb/c	lay		
City Park	0	0.0000	0.0000	0.0000	0.0000	1 1 1	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

# 6.0 Area Detail

6.1 Mitigation Measures Area

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Mitigated	0.0205	3.4000e- 004	0.0370	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0793	0.0793	2.1000e- 004		0.0845
Unmitigated	0.0205	3.4000e- 004	0.0370	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0793	0.0793	2.1000e- 004		0.0845

# 6.2 Area by SubCategory

**Unmitigated** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/e	day							lb/e	day		
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0170					0.0000	0.0000		0.0000	0.0000		 - - -	0.0000			0.0000
Landscaping	3.4300e- 003	3.4000e- 004	0.0370	0.0000		1.3000e- 004	1.3000e- 004	1	1.3000e- 004	1.3000e- 004		0.0793	0.0793	2.1000e- 004		0.0845
Total	0.0205	3.4000e- 004	0.0370	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0793	0.0793	2.1000e- 004		0.0845

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

# 6.2 Area by SubCategory

# Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/e	day							lb/d	day		
Architectural Coating	0.0000	1 1 1				0.0000	0.0000		0.0000	0.0000		1 1 1	0.0000			0.0000
Consumer Products	0.0170					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.4300e- 003	3.4000e- 004	0.0370	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0793	0.0793	2.1000e- 004		0.0845
Total	0.0205	3.4000e- 004	0.0370	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0793	0.0793	2.1000e- 004		0.0845

# 7.0 Water Detail

7.1 Mitigation Measures Water

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

## 8.0 Waste Detail

#### 8.1 Mitigation Measures Waste

# 9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

# **10.0 Stationary Equipment**

# Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

## **Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

#### **User Defined Equipment**

Equipment Type

Number

# **11.0 Vegetation**

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

Home Avenue Warehouse Project - Passenger Vehicles + Building (BAU Operations)

Fresno County, Annual

# **1.0 Project Characteristics**

# 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	170.00	1000sqft	3.90	170,000.00	0
Other Non-Asphalt Surfaces	0.96	Acre	0.96	41,817.60	0
Parking Lot	190.36	1000sqft	4.37	190,361.00	0
City Park	1.02	Acre	1.02	44,349.00	0

## **1.2 Other Project Characteristics**

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			<b>Operational Year</b>	2005
Utility Company	Pacific Gas and E	Electric Company			
CO2 Intensity (Ib/MWhr)	641.35	CH4 Intensity (Ib/MWhr)	0.033	N2O Intensity (Ib/MWhr)	0.004

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Area, Building Operations, and Passenger Vehicle Operations - 2005 PG&E CO2 Intensity Factors for 2005

Land Use - Up to 170,000-square-foot building; parking up to 190,361 sq ft; landscaping ~44,349 sq ft 10.25-acre site

Construction Phase - Operational run only

Off-road Equipment - Operational run only - zeroed out construction parameters

Off-road Equipment -

Trips and VMT - Operational run only

Grading -

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

Architectural Coating -

Vehicle Trips - Passenger car trip generation rate 202 daily passenger trips

Road Dust -

Area Coating -

Construction Off-road Equipment Mitigation -

Area Mitigation -

Water Mitigation -

Waste Mitigation -

Fleet Mix - Passenger vehicles consisting of LDA, LDT1, LDT2, and MDV

Energy Use -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.48	0.54
tblFleetMix	LDT1	0.08	0.09
tblFleetMix	LDT2	0.16	0.18
tblFleetMix	LHD1	0.04	0.00
tblFleetMix	LHD2	6.7150e-003	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.17	0.19
tblFleetMix	МН	7.9820e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	8.9300e-004	0.00
tblFleetMix	SBUS	9.6600e-004	0.00
tblFleetMix	UBUS	3.0700e-004	0.00
tblLandUse	LandUseSquareFeet	190,360.00	190,361.00
tblLandUse	LandUseSquareFeet	44,431.20	44,349.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

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

tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	203.98	641.35
tblTripsAndVMT	WorkerTripNumber	38.00	0.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	1.74	1.19
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	1.74	1.19
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	1.74	1.19

# 2.0 Emissions Summary

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

# 2.1 Overall Construction

# **Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							МТ	/yr		
2022	1.2304	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	1.2304	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							МТ	/yr		
2022	1.2304	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	1.2304	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-3-2022	4-2-2022	0.8789	0.8789
		Highest	0.8789	0.8789

# 2.2 Overall Operational

## Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	is/yr							MT	ī/yr		
Area	0.8818	5.0000e- 005	4.2400e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	6.4700e- 003	6.4700e- 003	3.0000e- 005	0.0000	7.2300e- 003
Energy	0.0174	0.1586	0.1332	9.5000e- 004		0.0121	0.0121		0.0121	0.0121	0.0000	736.9637	736.9637	0.0324	6.6800e- 003	739.7643
Mobile	0.3008	0.5164	3.8570	2.7100e- 003	0.2180	4.4800e- 003	0.2225	0.0579	4.1500e- 003	0.0621	0.0000	247.9861	247.9861	0.0345	0.0275	257.0351
Waste	n					0.0000	0.0000		0.0000	0.0000	32.4562	0.0000	32.4562	1.9181	0.0000	80.4089
Water	n	       				0.0000	0.0000		0.0000	0.0000	12.4720	63.1201	75.5921	1.2843	0.0306	116.8293
Total	1.2001	0.6751	3.9944	3.6600e- 003	0.2180	0.0166	0.2346	0.0579	0.0162	0.0741	44.9283	1,048.076 4	1,093.004 6	3.2693	0.0648	1,194.044 8

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

# 2.2 Overall Operational

# **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Area	0.8818	5.0000e- 005	4.2400e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	6.4700e- 003	6.4700e- 003	3.0000e- 005	0.0000	7.2300e- 003
Energy	0.0174	0.1586	0.1332	9.5000e- 004		0.0121	0.0121		0.0121	0.0121	0.0000	736.9637	736.9637	0.0324	6.6800e- 003	739.7643
Mobile	0.3008	0.5164	3.8570	2.7100e- 003	0.2180	4.4800e- 003	0.2225	0.0579	4.1500e- 003	0.0621	0.0000	247.9861	247.9861	0.0345	0.0275	257.0351
Waste						0.0000	0.0000		0.0000	0.0000	32.4562	0.0000	32.4562	1.9181	0.0000	80.4089
Water						0.0000	0.0000		0.0000	0.0000	12.4720	63.1201	75.5921	1.2843	0.0306	116.8293
Total	1.2001	0.6751	3.9944	3.6600e- 003	0.2180	0.0166	0.2346	0.0579	0.0162	0.0741	44.9283	1,048.076 4	1,093.004 6	3.2693	0.0648	1,194.044 8

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

# **3.0 Construction Detail**

### **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	1/3/2022	1/3/2022	5	1	

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

Acres of Grading (Grading Phase): 0

#### Acres of Paving: 5.33

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 255,015; Non-Residential Outdoor: 85,005; Striped Parking Area: 13,931 (Architectural Coating – sqft)

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	0.00	78	0.48

### Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
	Count	Number	Number	Number	Length	Length	Length	Class	Vehicle Class	Vehicle Class
Architectural Coating	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction** 

### 3.2 Architectural Coating - 2022

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	1.2304	, , ,				0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.2304	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

# 3.2 Architectural Coating - 2022

# Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Archit. Coating	1.2304					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.2304	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

# 3.2 Architectural Coating - 2022

# **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

# 4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Mitigated	0.3008	0.5164	3.8570	2.7100e- 003	0.2180	4.4800e- 003	0.2225	0.0579	4.1500e- 003	0.0621	0.0000	247.9861	247.9861	0.0345	0.0275	257.0351
Unmitigated	0.3008	0.5164	3.8570	2.7100e- 003	0.2180	4.4800e- 003	0.2225	0.0579	4.1500e- 003	0.0621	0.0000	247.9861	247.9861	0.0345	0.0275	257.0351

# 4.2 Trip Summary Information

	Aver	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	202.00	202.00	202.00	589,741	589,741
Total	202.00	202.00	202.00	589,741	589,741

# 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.477591	0.081668	0.164575	0.168109	0.036290	0.006715	0.016687	0.017024	0.000893	0.000307	0.021194	0.000966	0.007982
Other Non-Asphalt Surfaces	0.477591	0.081668	0.164575	0.168109	0.036290	0.006715	0.016687	0.017024	0.000893	0.000307	0.021194	0.000966	0.007982
Parking Lot	0.477591	0.081668	0.164575	0.168109	0.036290	0.006715	0.016687	0.017024	0.000893	0.000307	0.021194	0.000966	0.007982
Unrefrigerated Warehouse-No Rail	0.535450	0.091560	0.184510	0.188480	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

# 5.0 Energy Detail

### Historical Energy Use: Y

# 5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	564.3264	564.3264	0.0290	3.5200e- 003	566.1012
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	564.3264	564.3264	0.0290	3.5200e- 003	566.1012
NaturalGas Mitigated	0.0174	0.1586	0.1332	9.5000e- 004		0.0121	0.0121		0.0121	0.0121	0.0000	172.6373	172.6373	3.3100e- 003	3.1700e- 003	173.6632
NaturalGas Unmitigated	0.0174	0.1586	0.1332	9.5000e- 004		0.0121	0.0121		0.0121	0.0121	0.0000	172.6373	172.6373	3.3100e- 003	3.1700e- 003	173.6632

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

# 5.2 Energy by Land Use - NaturalGas

# **Unmitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							МТ	/yr		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	3.2351e +006	0.0174	0.1586	0.1332	9.5000e- 004		0.0121	0.0121		0.0121	0.0121	0.0000	172.6373	172.6373	3.3100e- 003	3.1700e- 003	173.6632
Total		0.0174	0.1586	0.1332	9.5000e- 004		0.0121	0.0121		0.0121	0.0121	0.0000	172.6373	172.6373	3.3100e- 003	3.1700e- 003	173.6632
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

## 5.2 Energy by Land Use - NaturalGas

### Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr		tons/yr						MT/yr								
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	3.2351e +006	0.0174	0.1586	0.1332	9.5000e- 004		0.0121	0.0121		0.0121	0.0121	0.0000	172.6373	172.6373	3.3100e- 003	3.1700e- 003	173.6632
Total		0.0174	0.1586	0.1332	9.5000e- 004		0.0121	0.0121		0.0121	0.0121	0.0000	172.6373	172.6373	3.3100e- 003	3.1700e- 003	173.6632

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

# 5.3 Energy by Land Use - Electricity

## **Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e			
Land Use	kWh/yr	MT/yr						
City Park	0	0.0000	0.0000	0.0000	0.0000			
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000			
Parking Lot	166756	48.5113	2.5000e- 003	3.0000e- 004	48.6639			
Unrefrigerated Warehouse-No Rail	1.7731e +006	515.8151	0.0265	3.2200e- 003	517.4373			
Total		564.3264	0.0290	3.5200e- 003	566.1012			

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Home Avenue Warehouse Project - Passenger Vehicles + Building (BAU Operations) - Fresno County, Annual

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

## 5.3 Energy by Land Use - Electricity

## Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e			
Land Use	kWh/yr	MT/yr						
City Park	0	0.0000	0.0000	0.0000	0.0000			
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000			
Parking Lot	166756	48.5113	2.5000e- 003	3.0000e- 004	48.6639			
Unrefrigerated Warehouse-No Rail	1.7731e +006	515.8151	0.0265	3.2200e- 003	517.4373			
Total		564.3264	0.0290	3.5200e- 003	566.1012			

# 6.0 Area Detail

6.1 Mitigation Measures Area

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Mitigated	0.8818	5.0000e- 005	4.2400e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	6.4700e- 003	6.4700e- 003	3.0000e- 005	0.0000	7.2300e- 003
Unmitigated	0.8818	5.0000e- 005	4.2400e- 003	0.0000		2.0000e- 005	2.0000e- 005	 - - -	2.0000e- 005	2.0000e- 005	0.0000	6.4700e- 003	6.4700e- 003	3.0000e- 005	0.0000	7.2300e- 003

# 6.2 Area by SubCategory

**Unmitigated** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory		tons/yr							MT/yr							
Architectural Coating	0.2018					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6794					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.5000e- 004	5.0000e- 005	4.2400e- 003	0.0000		2.0000e- 005	2.0000e- 005	1	2.0000e- 005	2.0000e- 005	0.0000	6.4700e- 003	6.4700e- 003	3.0000e- 005	0.0000	7.2300e- 003
Total	0.8818	5.0000e- 005	4.2400e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	6.4700e- 003	6.4700e- 003	3.0000e- 005	0.0000	7.2300e- 003

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

## 6.2 Area by SubCategory

## Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr						MT/yr									
Architectural Coating	0.2018	1 1 1				0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6794					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.5000e- 004	5.0000e- 005	4.2400e- 003	0.0000		2.0000e- 005	2.0000e- 005	1 1 1 1 1	2.0000e- 005	2.0000e- 005	0.0000	6.4700e- 003	6.4700e- 003	3.0000e- 005	0.0000	7.2300e- 003
Total	0.8818	5.0000e- 005	4.2400e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	6.4700e- 003	6.4700e- 003	3.0000e- 005	0.0000	7.2300e- 003

# 7.0 Water Detail

7.1 Mitigation Measures Water

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

	Total CO2	CH4	N2O	CO2e			
Category	MT/yr						
Mitigated	75.5921	1.2843	0.0306	116.8293			
Unmitigated	75.5921	1.2843	0.0306	116.8293			

# 7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e		
Land Use	Mgal	MT/yr					
City Park	0/ 1.21531	1.2374	6.0000e- 005	1.0000e- 005	1.2413		
Other Non- Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000		
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000		
Unrefrigerated Warehouse-No Rail	39.3125 / 0	74.3547	1.2842	0.0306	115.5879		
Total		75.5921	1.2842	0.0306	116.8293		

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Home Avenue Warehouse Project - Passenger Vehicles + Building (BAU Operations) - Fresno County, Annual

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

#### 7.2 Water by Land Use

#### Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e			
Land Use	Mgal	MT/yr						
City Park	0 / 1.21531	1.2374	6.0000e- 005	1.0000e- 005	1.2413			
Other Non- Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000			
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000			
Unrefrigerated Warehouse-No Rail	39.3125 / 0	74.3547	1.2842	0.0306	115.5879			
Total		75.5921	1.2842	0.0306	116.8293			

## 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

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Home Avenue Warehouse Project - Passenger Vehicles + Building (BAU Operations) - Fresno County, Annual

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

### Category/Year

	Total CO2	CH4	N2O	CO2e				
	MT/yr							
Mitigated	32.4562	1.9181	0.0000	80.4089				
Unmitigated	32.4562	1.9181	0.0000	80.4089				

# 8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e			
Land Use	tons	MT/yr						
City Park	0.09	0.0183	1.0800e- 003	0.0000	0.0453			
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000			
Unrefrigerated Warehouse-No Rail	159.8	32.4380	1.9170	0.0000	80.3637			
Total		32.4562	1.9181	0.0000	80.4089			

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Home Avenue Warehouse Project - Passenger Vehicles + Building (BAU Operations) - Fresno County, Annual

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

#### 8.2 Waste by Land Use

**Mitigated** 

	Waste Disposed	Total CO2	CH4	N2O	CO2e			
Land Use	tons	MT/yr						
City Park	0.09	0.0183	1.0800e- 003	0.0000	0.0453			
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000			
Unrefrigerated Warehouse-No Rail	159.8	32.4380	1.9170	0.0000	80.3637			
Total		32.4562	1.9181	0.0000	80.4089			

# 9.0 Operational Offroad

Equipment Type Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

# **10.0 Stationary Equipment**

#### Fire Pumps and Emergency Generators

Equipment Type Number Hours/Day Hours/Year Horse Power Load Factor Fuel Type	Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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#### **Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

**User Defined Equipment** 

Number

Home Avenue Warehouse Project - Passenger Vehicles + Building (BAU Operations) - Fresno County, Annual

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

Equipment Type

11.0 Vegetation

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

## Home Avenue Warehouse Project - Project Truck Operations (BAU)

Fresno County, Annual

# **1.0 Project Characteristics**

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	170.00	1000sqft	3.90	170,000.00	0
Other Non-Asphalt Surfaces	0.96	Acre	0.96	41,817.60	0
Parking Lot	190.36	1000sqft	4.37	190,361.00	0
City Park	1.02	Acre	1.02	44,349.00	0

#### **1.2 Other Project Characteristics**

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			<b>Operational Year</b>	2005
Utility Company	Pacific Gas and E	Electric Company			
CO2 Intensity (Ib/MWhr)	641.35	CH4 Intensity (Ib/MWhr)	0.033	N2O Intensity (Ib/MWhr)	0.004

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Truck Operations - BAU (2005)

Land Use - Up to 170,000-square-foot building; parking up to 190,361 sq ft; landscaping ~44,349 sq ft 10.25-acre site

Construction Phase - Operational truck only run - zeroed out construction parameters

Off-road Equipment - Operational truck only run - zeroed out construction parameters

Trips and VMT - Operational truck only run - zeroed out construction parameters

Architectural Coating - Operational truck only run - zeroed out construction parameters

Vehicle Trips - Truck trip generation rate 50-mile trip length for SJVAPCD truck only runs and 100% primary trips Vehicle Emission Factors -

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

Vehicle Emission Factors -

- Vehicle Emission Factors -
- Consumer Products Operational truck only run zeroed out area parameters
- Area Coating Operational truck only run zeroed out area parameters
- Landscape Equipment Operational truck only run zeroed out area parameters
- Energy Use Truck only run
- Water And Wastewater Operational truck only run water and wastewater in a separate run
- Solid Waste Truck only run

#### Area Mitigation -

Fleet Mix - Truck operational fleet mix (100% 4+ axle trucks)

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	0.00
tblArchitecturalCoating	EF_Parking	150.00	0.00
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstructionPhase	NumDays	20.00	1.00
tblConsumerProducts	ROG_EF	2.14E-05	1E-07
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	1E-10
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	1E-11
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	3.22	0.00
tblEnergyUse	NT24E	5.13	0.00
tblEnergyUse	NT24NG	1.05	0.00
tblEnergyUse	T24E	0.93	0.00
tblEnergyUse	T24NG	16.86	0.00
tblFleetMix	HHD	0.02	1.00
tblFleetMix	LDA	0.48	0.00
tblFleetMix	LDT1	0.08	0.00

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

tblFleetMix	LDT2	0.16	0.00
tblFleetMix	LHD1	0.04	0.00
tblFleetMix	LHD2	6.7150e-003	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.17	0.00
tblFleetMix	МН	7.9820e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	8.9300e-004	0.00
tblFleetMix	SBUS	9.6600e-004	0.00
tblFleetMix	UBUS	3.0700e-004	0.00
tblLandscapeEquipment	NumberSummerDays	180	1
tblLandUse	LandUseSquareFeet	190,360.00	190,361.00
tblLandUse	LandUseSquareFeet	44,431.20	44,349.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	203.98	641.35
tblSolidWaste	SolidWasteGenerationRate	0.09	0.00
tblSolidWaste	SolidWasteGenerationRate	159.80	0.00
tblTripsAndVMT	WorkerTripNumber	38.00	0.00
tblVehicleTrips	CC_TL	7.30	50.00
tblVehicleTrips	CNW_TL	7.30	50.00
tblVehicleTrips	CW_TL	9.50	50.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	1.74	0.55
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	1.74	0.55

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

tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	1.74	0.55
tblWater	IndoorWaterUseRate	39,312,500.00	0.00
tblWater	OutdoorWaterUseRate	1,215,310.98	0.00

# 2.0 Emissions Summary

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

## 2.1 Overall Construction

## **Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							MT	ī/yr		
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

#### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							МТ	/yr		
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

Quarter
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Start Date

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

			Highest		
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# 2.2 Overall Operational

# Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Area	3.1100e- 003	0.0000	2.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e- 005	4.0000e- 005	0.0000	0.0000	4.0000e- 005
Energy	0.0000	0.0000	0.0000	0.0000	, <b></b>	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	2.8947	36.9422	8.7309	0.2953	0.7312	1.3491	2.0804	0.2010	1.2908	1.4918	0.0000	3,064.576 0	3,064.576 0	0.1290	0.4795	3,210.691 7
Waste	/a====================================	,	· · · · · · · · · · · · · · · · · · ·	,	,	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water	/a====================================		, , , , ,	,	,	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.8978	36.9422	8.7309	0.2953	0.7312	1.3491	2.0804	0.2010	1.2908	1.4918	0.0000	3,064.576 0	3,064.576 0	0.1290	0.4795	3,210.691 7

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

## 2.2 Overall Operational

#### **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Area	3.1100e- 003	0.0000	2.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e- 005	4.0000e- 005	0.0000	0.0000	4.0000e- 005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	2.8947	36.9422	8.7309	0.2953	0.7312	1.3491	2.0804	0.2010	1.2908	1.4918	0.0000	3,064.576 0	3,064.576 0	0.1290	0.4795	3,210.691 7
Waste	ri — — — — — — — — — — — — — — — — — — —					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water	n — — — — — — — — — — — — — — — — — — —					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.8978	36.9422	8.7309	0.2953	0.7312	1.3491	2.0804	0.2010	1.2908	1.4918	0.0000	3,064.576 0	3,064.576 0	0.1290	0.4795	3,210.691 7

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

# **3.0 Construction Detail**

#### **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	1/3/2022	1/3/2022	5	1	

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

Acres of Grading (Grading Phase): 0

#### Acres of Paving: 5.33

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 255,015; Non-Residential Outdoor: 85,005; Striped Parking Area: 13,931 (Architectural Coating – sqft)

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	0.00	78	0.48

#### Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
	Count	Number	Number	Number	Length	Length	Length	Class	Vehicle Class	Vehicle Class
Architectural Coating	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction** 

#### 3.2 Architectural Coating - 2022

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.0000					0.0000	0.0000	, , ,	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	1 1 1 1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

# 3.2 Architectural Coating - 2022

### Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

# 3.2 Architectural Coating - 2022

#### Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

# 4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Mitigated	2.8947	36.9422	8.7309	0.2953	0.7312	1.3491	2.0804	0.2010	1.2908	1.4918	0.0000	3,064.576 0	3,064.576 0	0.1290	0.4795	3,210.691 7
Unmitigated	2.8947	36.9422	8.7309	0.2953	0.7312	1.3491	2.0804	0.2010	1.2908	1.4918	0.0000	3,064.576 0	3,064.576 0	0.1290	0.4795	3,210.691 7

# 4.2 Trip Summary Information

	Aver	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	94.00	94.00	94.00	1,710,800	1,710,800
Total	94.00	94.00	94.00	1,710,800	1,710,800

# 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	50.00	50.00	50.00	59.00	0.00	41.00	100	0	0

4.4 Fleet Mix

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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.477591	0.081668	0.164575	0.168109	0.036290	0.006715	0.016687	0.017024	0.000893	0.000307	0.021194	0.000966	0.007982
Other Non-Asphalt Surfaces	0.477591	0.081668	0.164575	0.168109	0.036290	0.006715	0.016687	0.017024	0.000893	0.000307	0.021194	0.000966	0.007982
Parking Lot	0.477591	0.081668	0.164575	0.168109	0.036290	0.006715	0.016687	0.017024	0.000893	0.000307	0.021194	0.000966	0.007982
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000

# 5.0 Energy Detail

# Historical Energy Use: N

# 5.1 Mitigation Measures Energy

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		tons/yr											MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

## 5.2 Energy by Land Use - NaturalGas

#### **Unmitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr		tons/yr											MT	/yr		
City Park	0	0.0000	0.0000	0.0000	0.0000	1 1 1	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

## 5.2 Energy by Land Use - NaturalGas

### Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr		tons/yr											МТ	/yr		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

5.3 Energy by Land Use - Electricity

<u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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

## 5.3 Energy by Land Use - Electricity

## Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

# 6.0 Area Detail

6.1 Mitigation Measures Area

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Mitigated	3.1100e- 003	0.0000	2.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e- 005	4.0000e- 005	0.0000	0.0000	4.0000e- 005
Unmitigated	3.1100e- 003	0.0000	2.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e- 005	4.0000e- 005	0.0000	0.0000	4.0000e- 005

# 6.2 Area by SubCategory

**Unmitigated** 

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					tons	s/yr				МТ	/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.1100e- 003	,	,			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e- 005	4.0000e- 005	0.0000	0.0000	4.0000e- 005
Total	3.1100e- 003	0.0000	2.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e- 005	4.0000e- 005	0.0000	0.0000	4.0000e- 005

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

## 6.2 Area by SubCategory

## Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory		tons/yr											МТ	/yr		
Architectural Coating	0.0000	1 1 1	1 1 1			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.1100e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e- 005	4.0000e- 005	0.0000	0.0000	4.0000e- 005
Total	3.1100e- 003	0.0000	2.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e- 005	4.0000e- 005	0.0000	0.0000	4.0000e- 005

# 7.0 Water Detail

7.1 Mitigation Measures Water

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

	Total CO2	CH4	N2O	CO2e
Category		МТ	/yr	
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

# 7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0/0	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0/0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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

## 7.2 Water by Land Use

## Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e	
Land Use	Mgal	MT/yr				
City Park	0/0	0.0000	0.0000	0.0000	0.0000	
Other Non- Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000	
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000	
Unrefrigerated Warehouse-No Rail	0/0	0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000	

# 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

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

#### Category/Year

	Total CO2	CH4	N2O	CO2e		
	MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000		
Unmitigated	0.0000	0.0000	0.0000	0.0000		

# 8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e	
Land Use	tons	MT/yr				
City Park	0	0.0000	0.0000	0.0000	0.0000	
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000	
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000	

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

#### 8.2 Waste by Land Use

**Mitigated** 

	Waste Disposed	Total CO2	CH4	N2O	CO2e	
Land Use	tons	MT/yr				
City Park	0	0.0000	0.0000	0.0000	0.0000	
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000	
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000	

# 9.0 Operational Offroad

Equipment Type Nur	Imber	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

# **10.0 Stationary Equipment**

## Fire Pumps and Emergency Generators

	Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
--	----------------	--------	-----------	------------	-------------	-------------	-----------

#### **Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

#### User Defined Equipment

Number

Home Avenue Warehouse Project - Project Truck Operations (BAU) - Fresno County, Annual

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

Equipment Type

11.0 Vegetation

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

Home Avenue Warehouse Project - Passenger Vehicles + Building Operations (2030)

Fresno County, Annual

# **1.0 Project Characteristics**

## 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	170.00	1000sqft	3.90	170,000.00	0
Other Non-Asphalt Surfaces	0.96	Acre	0.96	41,817.60	0
Parking Lot	190.36	1000sqft	4.37	190,361.00	0
City Park	1.02	Acre	1.02	44,349.00	0

#### **1.2 Other Project Characteristics**

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			<b>Operational Year</b>	2030
Utility Company	Pacific Gas and E	Electric Company			
CO2 Intensity (Ib/MWhr)	184	CH4 Intensity (Ib/MWhr)	0.033	N2O Intensity (Ib/MWhr)	0.004

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Area, Building Operations, and Passenger Vehicle Operations - 2030 Operations 2030 PG&E CO2 Intensity Factors

Land Use - Up to 170,000-square-foot building; parking up to 190,361 sq ft; landscaping ~44,349 sq ft 10.25-acre site

Construction Phase - Operational run only

Off-road Equipment - Operational run only - zeroed out construction parameters

Off-road Equipment -

Trips and VMT - Operational run only

Grading -

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

Architectural Coating -

Vehicle Trips - Passenger car trip generation rate 202 daily passenger trips

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust -

Area Coating - SJVAPCD Rule 4601 Architectural Coatings

Construction Off-road Equipment Mitigation -

Water Mitigation - Calgreen Code and MWELO water conservation compliance

Waste Mitigation - CalRecycle 75% diversion mandate

Fleet Mix - Passenger vehicles consisting of LDA, LDT1, LDT2, and MDV Adjusted based on the 2030 operational year Fresno County fleet mix

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	50
tblAreaCoating	Area_EF_Nonresidential_Interior	150	50
tblConstructionPhase	NumDays	20.00	1.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.54	0.60
tblFleetMix	LDT1	0.05	0.06
tblFleetMix	LDT2	0.18	0.19
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.9260e-003	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.13	0.15
tblFleetMix	МН	2.4420e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	6.7900e-004	0.00
tblFleetMix	SBUS	1.3250e-003	0.00

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

tblFleetMix	UBUS	2.7800e-004	0.00
tblLandUse	LandUseSquareFeet	190,360.00	190,361.00
tblLandUse	LandUseSquareFeet	44,431.20	44,349.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	203.98	184
tblTripsAndVMT	WorkerTripNumber	38.00	0.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	1.74	1.19
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	1.74	1.19
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	1.74	1.19

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

#### 2.1 Overall Construction

#### **Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							МТ	/yr		
2022	1.2304	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	1.2304	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

#### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							МТ	/yr		
2022	1.2304	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	1.2304	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-3-2022	4-2-2022	0.8789	0.8789
		Highest	0.8789	0.8789

#### 2.2 Overall Operational

#### Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	ī/yr		
Area	0.7240	3.0000e- 005	3.3100e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.4700e- 003	6.4700e- 003	2.0000e- 005	0.0000	6.8900e- 003
Energy	0.0164	0.1493	0.1254	9.0000e- 004		0.0113	0.0113		0.0113	0.0113	0.0000	299.7056	299.7056	0.0277	5.9600e- 003	302.1754
Mobile	0.0350	0.0295	0.4529	1.5600e- 003	0.2180	7.1000e- 004	0.2187	0.0579	6.6000e- 004	0.0586	0.0000	143.0511	143.0511	3.4000e- 003	3.8100e- 003	144.2700
Waste	7,					0.0000	0.0000		0.0000	0.0000	32.4562	0.0000	32.4562	1.9181	0.0000	80.4089
Water	7,					0.0000	0.0000		0.0000	0.0000	12.4720	18.1088	30.5809	1.2843	0.0306	71.8180
Total	0.7754	0.1788	0.5816	2.4600e- 003	0.2180	0.0121	0.2301	0.0579	0.0120	0.0699	44.9283	460.8720	505.8002	3.2335	0.0404	598.6792

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

#### 2.2 Overall Operational

#### **Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Area	0.7240	3.0000e- 005	3.3100e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.4700e- 003	6.4700e- 003	2.0000e- 005	0.0000	6.8900e- 003
Energy	0.0164	0.1493	0.1254	9.0000e- 004		0.0113	0.0113		0.0113	0.0113	0.0000	299.7056	299.7056	0.0277	5.9600e- 003	302.1754
Mobile	0.0350	0.0295	0.4529	1.5600e- 003	0.2180	7.1000e- 004	0.2187	0.0579	6.6000e- 004	0.0586	0.0000	143.0511	143.0511	3.4000e- 003	3.8100e- 003	144.2700
Waste						0.0000	0.0000		0.0000	0.0000	24.3422	0.0000	24.3422	1.4386	0.0000	60.3067
Water						0.0000	0.0000		0.0000	0.0000	9.9776	14.4871	24.4647	1.0274	0.0245	57.4544
Total	0.7754	0.1788	0.5816	2.4600e- 003	0.2180	0.0121	0.2301	0.0579	0.0120	0.0699	34.3198	457.2502	491.5700	2.4971	0.0343	564.2134

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23.61	0.79	2.81	22.77	15.17	5.76

## **3.0 Construction Detail**

#### **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	1/3/2022	1/3/2022	5	1	

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

Acres of Grading (Grading Phase): 0

#### Acres of Paving: 5.33

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 255,015; Non-Residential Outdoor: 85,005; Striped Parking Area: 13,931 (Architectural Coating – sqft)

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	0.00	78	0.48

#### Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
	Count	Number	Number	Number	Length	Length	Length	Class	Vehicle Class	Vehicle Class
Architectural Coating	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction** 

#### 3.2 Architectural Coating - 2022

#### **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	1.2304	, , ,				0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.2304	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

# 3.2 Architectural Coating - 2022

#### Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

#### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Archit. Coating	1.2304					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.2304	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

# 3.2 Architectural Coating - 2022

#### **Mitigated Construction Off-Site**

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	'/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## 4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Mitigated	0.0350	0.0295	0.4529	1.5600e- 003	0.2180	7.1000e- 004	0.2187	0.0579	6.6000e- 004	0.0586	0.0000	143.0511	143.0511	3.4000e- 003	3.8100e- 003	144.2700
Unmitigated	0.0350	0.0295	0.4529	1.5600e- 003	0.2180	7.1000e- 004	0.2187	0.0579	6.6000e- 004	0.0586	0.0000	143.0511	143.0511	3.4000e- 003	3.8100e- 003	144.2700

# 4.2 Trip Summary Information

	Aver	age Daily Trip Ra	te	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	202.00	202.00	202.00	589,741	589,741
Total	202.00	202.00	202.00	589,741	589,741

## 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.542478	0.054482	0.176258	0.134700	0.021641	0.005926	0.015139	0.022678	0.000679	0.000278	0.021974	0.001325	0.002442
Other Non-Asphalt Surfaces	0.542478	0.054482	0.176258	0.134700	0.021641	0.005926	0.015139	0.022678	0.000679	0.000278	0.021974	0.001325	0.002442
Parking Lot	0.542478	0.054482	0.176258	0.134700	0.021641	0.005926	0.015139	0.022678	0.000679	0.000278	0.021974	0.001325	0.002442
Unrefrigerated Warehouse-No Rail	0.597500	0.060010	0.194130	0.148360	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

## 5.0 Energy Detail

#### Historical Energy Use: N

## 5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	137.2288	137.2288	0.0246	2.9800e- 003	138.7331
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	137.2288	137.2288	0.0246	2.9800e- 003	138.7331
NaturalGas Mitigated	0.0164	0.1493	0.1254	9.0000e- 004		0.0113	0.0113		0.0113	0.0113	0.0000	162.4768	162.4768	3.1100e- 003	2.9800e- 003	163.4423
NaturalGas Unmitigated	0.0164	0.1493	0.1254	9.0000e- 004		0.0113	0.0113		0.0113	0.0113	0.0000	162.4768	162.4768	3.1100e- 003	2.9800e- 003	163.4423

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

### 5.2 Energy by Land Use - NaturalGas

#### **Unmitigated**

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							МТ	/yr		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	3.0447e +006	0.0164	0.1493	0.1254	9.0000e- 004		0.0113	0.0113		0.0113	0.0113	0.0000	162.4768	162.4768	3.1100e- 003	2.9800e- 003	163.4423
Total		0.0164	0.1493	0.1254	9.0000e- 004		0.0113	0.0113		0.0113	0.0113	0.0000	162.4768	162.4768	3.1100e- 003	2.9800e- 003	163.4423

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

### 5.2 Energy by Land Use - NaturalGas

#### Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							МТ	/yr		
City Park	0	0.0000	0.0000	0.0000	0.0000	1 1 1	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	3.0447e +006	0.0164	0.1493	0.1254	9.0000e- 004		0.0113	0.0113		0.0113	0.0113	0.0000	162.4768	162.4768	3.1100e- 003	2.9800e- 003	163.4423
Total		0.0164	0.1493	0.1254	9.0000e- 004		0.0113	0.0113		0.0113	0.0113	0.0000	162.4768	162.4768	3.1100e- 003	2.9800e- 003	163.4423

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

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	66626.3	5.5607	1.0000e- 003	1.2000e- 004	5.6217
Unrefrigerated Warehouse-No Rail	1.5776e +006	131.6681	0.0236	2.8600e- 003	133.1114
Total		137.2288	0.0246	2.9800e- 003	138.7331

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

## 5.3 Energy by Land Use - Electricity

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	66626.3	5.5607	1.0000e- 003	1.2000e- 004	5.6217
Unrefrigerated Warehouse-No Rail	1.5776e +006	131.6681	0.0236	2.8600e- 003	133.1114
Total		137.2288	0.0246	2.9800e- 003	138.7331

## 6.0 Area Detail

6.1 Mitigation Measures Area

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Mitigated	0.7240	3.0000e- 005	3.3100e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.4700e- 003	6.4700e- 003	2.0000e- 005	0.0000	6.8900e- 003
Unmitigated	0.7240	3.0000e- 005	3.3100e- 003	0.0000		1.0000e- 005	1.0000e- 005	 - - -	1.0000e- 005	1.0000e- 005	0.0000	6.4700e- 003	6.4700e- 003	2.0000e- 005	0.0000	6.8900e- 003

## 6.2 Area by SubCategory

**Unmitigated** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							MT	ſ/yr		
Architectural Coating	0.0442					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6794					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e- 004	3.0000e- 005	3.3100e- 003	0.0000		1.0000e- 005	1.0000e- 005	1	1.0000e- 005	1.0000e- 005	0.0000	6.4700e- 003	6.4700e- 003	2.0000e- 005	0.0000	6.8900e- 003
Total	0.7239	3.0000e- 005	3.3100e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.4700e- 003	6.4700e- 003	2.0000e- 005	0.0000	6.8900e- 003

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

#### 6.2 Area by SubCategory

#### Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	/yr		
Architectural Coating	0.0442	1	1 1 1			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6794					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e- 004	3.0000e- 005	3.3100e- 003	0.0000		1.0000e- 005	1.0000e- 005	1 1 1 1 1	1.0000e- 005	1.0000e- 005	0.0000	6.4700e- 003	6.4700e- 003	2.0000e- 005	0.0000	6.8900e- 003
Total	0.7239	3.0000e- 005	3.3100e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.4700e- 003	6.4700e- 003	2.0000e- 005	0.0000	6.8900e- 003

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

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

	Total CO2	CH4	N2O	CO2e
Category		МТ	/yr	
Mitigated	24.4647	1.0274	0.0245	57.4544
Unmitigated	30.5809	1.2843	0.0306	71.8180

# 7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	/yr	
City Park	0/ 1.21531	0.3550	6.0000e- 005	1.0000e- 005	0.3589
Other Non- Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	39.3125 / 0	30.2259	1.2842	0.0306	71.4591
Total		30.5809	1.2842	0.0306	71.8180

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

#### 7.2 Water by Land Use

#### Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e		
Land Use	Mgal	MT/yr					
City Park	0 / 0.972249	0.2840	5.0000e- 005	1.0000e- 005	0.2871		
Other Non- Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000		
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000		
Unrefrigerated Warehouse-No Rail	31.45/0	24.1807	1.0274	0.0245	57.1673		
Total		24.4647	1.0274	0.0245	57.4544		

## 8.0 Waste Detail

#### 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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

#### Category/Year

	Total CO2	CH4	N2O	CO2e			
	MT/yr						
Mitigated	24.3422	1.4386	0.0000	60.3067			
Unmitigated	32.4562	1.9181	0.0000	80.4089			

# 8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	/yr	
City Park	0.09	0.0183	1.0800e- 003	0.0000	0.0453
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	159.8	32.4380	1.9170	0.0000	80.3637
Total		32.4562	1.9181	0.0000	80.4089

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

#### 8.2 Waste by Land Use

**Mitigated** 

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	ī/yr	
City Park	0.0675	0.0137	8.1000e- 004	0.0000	0.0340
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	119.85	24.3285	1.4378	0.0000	60.2728
Total		24.3422	1.4386	0.0000	60.3067

## 9.0 Operational Offroad

Equipment Type Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

## **10.0 Stationary Equipment**

#### Fire Pumps and Emergency Generators

|--|

#### **Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

**User Defined Equipment** 

Number

Home Avenue Warehouse Project - Passenger Vehicles + Building Operations (2030) - Fresno County, Annual

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

Equipment Type

11.0 Vegetation

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

Home Avenue Warehouse Project - Project Truck Operations (2030)

Fresno County, Annual

## **1.0 Project Characteristics**

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	170.00	1000sqft	3.90	170,000.00	0
Other Non-Asphalt Surfaces	0.96	Acre	0.96	41,817.60	0
Parking Lot	190.36	1000sqft	4.37	190,361.00	0
City Park	1.02	Acre	1.02	44,349.00	0

#### **1.2 Other Project Characteristics**

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			Operational Year	2030
Utility Company	Pacific Gas and I	Electric Company			
CO2 Intensity (Ib/MWhr)	184	CH4 Intensity (Ib/MWhr)	0.033	N2O Intensity ( (Ib/MWhr)	).004

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Truck Operations - 2030 operational year

Land Use - Up to 170,000-square-foot building; parking up to 190,361 sq ft; landscaping ~44,349 sq ft 10.25-acre site

Construction Phase - Operational truck only run - zeroed out construction parameters

Off-road Equipment - Operational truck only run - zeroed out construction parameters

Trips and VMT - Operational truck only run - zeroed out construction parameters

Architectural Coating - Operational truck only run - zeroed out construction parameters

Vehicle Trips - Truck trip generation rate 50-mile trip length for SJVAPCD truck only runs and 100% primary trips Vehicle Emission Factors -

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

Vehicle Emission Factors -

- Vehicle Emission Factors -
- Consumer Products Operational truck only run zeroed out area parameters
- Area Coating Operational truck only run zeroed out area parameters
- Landscape Equipment Operational truck only run zeroed out area parameters
- Energy Use Truck only run

Water And Wastewater - Operational truck only run - water and wastewater in a separate run

Solid Waste - Truck only run

Fleet Mix - Truck operational fleet mix (100% 4+ axle trucks)

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	0.00
tblArchitecturalCoating	EF_Parking	150.00	0.00
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstructionPhase	NumDays	20.00	1.00
tblConsumerProducts	ROG_EF	2.14E-05	1E-07
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	1E-10
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	1E-11
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	3.22	0.00
tblEnergyUse	NT24E	5.13	0.00
tblEnergyUse	NT24NG	1.05	0.00
tblEnergyUse	T24E	0.93	0.00
tblEnergyUse	T24NG	16.86	0.00
tblFleetMix	HHD	0.02	1.00
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT1	0.05	0.00
tblFleetMix	LDT2	0.18	0.00

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

tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.9260e-003	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	МН	2.4420e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	6.7900e-004	0.00
tblFleetMix	SBUS	1.3250e-003	0.00
tblFleetMix	UBUS	2.7800e-004	0.00
tblLandscapeEquipment	NumberSummerDays	180	1
tblLandUse	LandUseSquareFeet	190,360.00	190,361.00
tblLandUse	LandUseSquareFeet	44,431.20	44,349.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	203.98	184
tblSolidWaste	SolidWasteGenerationRate	0.09	0.00
tblSolidWaste	SolidWasteGenerationRate	159.80	0.00
tblTripsAndVMT	WorkerTripNumber	38.00	0.00
tblVehicleTrips	CC_TL	7.30	50.00
tblVehicleTrips	CNW_TL	7.30	50.00
tblVehicleTrips	CW_TL	9.50	50.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	1.74	0.55
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	1.74	0.55
tblVehicleTrips	WD_TR	0.78	0.00

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

tblVehicleTrips	WD_TR	1.74	0.55
tblWater	IndoorWaterUseRate	39,312,500.00	0.00
tblWater	OutdoorWaterUseRate	1,215,310.98	0.00

## 2.0 Emissions Summary

#### 2.1 Overall Construction

**Unmitigated Construction** 

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							MT	'/yr		
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

#### **Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							МТ	'/yr		
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

### 2.2 Overall Operational

#### Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Area	3.1100e- 003	0.0000	2.0000e- 005	0.0000	) ) 	0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e- 005	4.0000e- 005	0.0000	0.0000	4.0000e- 005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0591	4.5396	0.6895	0.0208	0.7312	0.0483	0.7794	0.2010	0.0462	0.2471	0.0000	2,001.265 9	2,001.265 9	9.9800e- 003	0.3147	2,095.307 5
Waste				, , ,	, , ,	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0622	4.5396	0.6895	0.0208	0.7312	0.0483	0.7794	0.2010	0.0462	0.2471	0.0000	2,001.266 0	2,001.266 0	9.9800e- 003	0.3147	2,095.307 5

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

#### 2.2 Overall Operational

#### **Mitigated Operational**

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	'/yr		
Area	3.1100e- 003	0.0000	2.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e- 005	4.0000e- 005	0.0000	0.0000	4.0000e- 005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0591	4.5396	0.6895	0.0208	0.7312	0.0483	0.7794	0.2010	0.0462	0.2471	0.0000	2,001.265 9	2,001.265 9	9.9800e- 003	0.3147	2,095.307 5
Waste	n					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0622	4.5396	0.6895	0.0208	0.7312	0.0483	0.7794	0.2010	0.0462	0.2471	0.0000	2,001.266 0	2,001.266 0	9.9800e- 003	0.3147	2,095.307 5

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

## **3.0 Construction Detail**

#### **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	1/3/2022	1/3/2022	5	1	

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

Acres of Grading (Grading Phase): 0

#### Acres of Paving: 5.33

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 255,015; Non-Residential Outdoor: 85,005; Striped Parking Area: 13,931 (Architectural Coating – sqft)

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	0.00	78	0.48

#### Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
	Count	Number	Number	Number	Length	Length	Length	Class	Vehicle Class	Vehicle Class
Architectural Coating	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction** 

#### 3.2 Architectural Coating - 2022

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.0000					0.0000	0.0000	, , ,	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	1 1 1 1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

# 3.2 Architectural Coating - 2022

#### Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

# 3.2 Architectural Coating - 2022

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

## 4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Mitigated	0.0591	4.5396	0.6895	0.0208	0.7312	0.0483	0.7794	0.2010	0.0462	0.2471	0.0000	2,001.265 9	2,001.265 9	9.9800e- 003	0.3147	2,095.307 5
Unmitigated	0.0591	4.5396	0.6895	0.0208	0.7312	0.0483	0.7794	0.2010	0.0462	0.2471	0.0000	2,001.265 9	2,001.265 9	9.9800e- 003	0.3147	2,095.307 5

## 4.2 Trip Summary Information

	Aver	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	94.00	94.00	94.00	1,710,800	1,710,800
Total	94.00	94.00	94.00	1,710,800	1,710,800

## 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	50.00	50.00	50.00	59.00	0.00	41.00	100	0	0

4.4 Fleet Mix

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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.542478	0.054482	0.176258	0.134700	0.021641	0.005926	0.015139	0.022678	0.000679	0.000278	0.021974	0.001325	0.002442
Other Non-Asphalt Surfaces	0.542478	0.054482	0.176258	0.134700	0.021641	0.005926	0.015139	0.022678	0.000679	0.000278	0.021974	0.001325	0.002442
Parking Lot	0.542478	0.054482	0.176258	0.134700	0.021641	0.005926	0.015139	0.022678	0.000679	0.000278	0.021974	0.001325	0.002442
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000

## 5.0 Energy Detail

#### Historical Energy Use: N

## 5.1 Mitigation Measures Energy

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

### 5.2 Energy by Land Use - NaturalGas

#### **Unmitigated**

	NaturalGa s Use	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							МТ	/yr		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

### 5.2 Energy by Land Use - NaturalGas

#### Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Land Use	kBTU/yr	tons/yr											MT/yr						
City Park	0	0.0000	0.0000	0.0000	0.0000	1 1 1	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		

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

# 5.3 Energy by Land Use - Electricity

#### **Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e							
Land Use	kWh/yr	MT/yr										
City Park	0	0.0000	0.0000	0.0000	0.0000							
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000							
Parking Lot	0	0.0000	0.0000	0.0000	0.0000							
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000							
Total		0.0000	0.0000	0.0000	0.0000							

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

### 5.3 Energy by Land Use - Electricity

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e							
Land Use	kWh/yr	MT/yr										
City Park	0	0.0000	0.0000	0.0000	0.0000							
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000							
Parking Lot	0	0.0000	0.0000	0.0000	0.0000							
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000							
Total		0.0000	0.0000	0.0000	0.0000							

## 6.0 Area Detail

6.1 Mitigation Measures Area

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr												МТ	/yr		
Mitigated	3.1100e- 003	0.0000	2.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e- 005	4.0000e- 005	0.0000	0.0000	4.0000e- 005
Unmitigated	3.1100e- 003	0.0000	2.0000e- 005	0.0000		0.0000	0.0000	<b></b>	0.0000	0.0000	0.0000	4.0000e- 005	4.0000e- 005	0.0000	0.0000	4.0000e- 005

## 6.2 Area by SubCategory

#### **Unmitigated**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
SubCategory	tons/yr											MT/yr						
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Consumer Products	3.1100e- 003	,			,	0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Landscaping	0.0000	0.0000	2.0000e- 005	0.0000	,	0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e- 005	4.0000e- 005	0.0000	0.0000	4.0000e- 005		
Total	3.1100e- 003	0.0000	2.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e- 005	4.0000e- 005	0.0000	0.0000	4.0000e- 005		

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

### 6.2 Area by SubCategory

#### Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
SubCategory	tons/yr											MT/yr						
Architectural Coating	0.0000	1 1 1	1 1 1			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Consumer Products	3.1100e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Landscaping	0.0000	0.0000	2.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e- 005	4.0000e- 005	0.0000	0.0000	4.0000e- 005		
Total	3.1100e- 003	0.0000	2.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e- 005	4.0000e- 005	0.0000	0.0000	4.0000e- 005		

## 7.0 Water Detail

7.1 Mitigation Measures Water
Home Avenue Warehouse Project - Project Truck Operations (2030) - Fresno County, Annual

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

	Total CO2	CH4	N2O	CO2e
Category		МТ	/yr	
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

## 7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	/yr	
City Park	0/0	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0/0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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Home Avenue Warehouse Project - Project Truck Operations (2030) - Fresno County, Annual

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

### 7.2 Water by Land Use

### Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	/yr	
City Park	0/0	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0/0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

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Home Avenue Warehouse Project - Project Truck Operations (2030) - Fresno County, Annual

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

### Category/Year

	Total CO2	CH4	N2O	CO2e
		MT	/yr	
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

## 8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	/yr	
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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Home Avenue Warehouse Project - Project Truck Operations (2030) - Fresno County, Annual

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

#### 8.2 Waste by Land Use

**Mitigated** 

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	ī/yr	
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

### 9.0 Operational Offroad

Equipment Type Number Hours/Day Days/Year Horse Power Load Facto		
	Hours/Day Days/Year Horse Power Load Factor Fuel Type	Equipment Type Number Hours/Day

### **10.0 Stationary Equipment**

### Fire Pumps and Emergency Generators

	Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
--	----------------	--------	-----------	------------	-------------	-------------	-----------

#### **Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

**User Defined Equipment** 

Number

Home Avenue Warehouse Project - Project Truck Operations (2030) - Fresno County, Annual

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

Equipment Type

11.0 Vegetation

#### **Yard Tractor Parameters**

Yard Tractor (Hostler)	4-6 Hours/Day
Load Factor	19.10% Intermodal Yard Activity and Emissions Evaluations, Environ
Load Factor	0.39 CARB Offroad 2017
HP	240 Range for Yard Hostlers is from 155 HP in Report to 240 HP in POLB Inventory
Age	2021 Assumed new Yard Tractor for proposed project
Calendar Year	2022 Operations could occur as early as 2022
Hours per Year	2,190 6 hours/day * 365 days/year

Input	Input Engine Here
Horsepower (hp)	240
Model year Calendar year	2021 2022
Activity (annual hours)	2190
Accumulated hours on equipment (estimate using annual-hours*age if you only know the age of the equipment)	2190
Load factor (check the lookup table)	0.39

## Intermediate steps

HPbin	300
NOX_EF0	0.12
NOx_DR	1.6E-06
NOx_FCF	0.950
PM_EF0	0.01
PM_DR	3.4E-07
PM_FCF	0.90
THC_EF0	0.05
THC_DR	1.2E-05
THC_FCF	0.90
NOx_EF (g/hp-hr)	0.12
PM_EF (g/hp-hr)	0.01
THC_EF (g/hp-hr)	0.07
CO2_EF (kg/gallon-diesel)*	10.21
BSFC (lb/hp-hr)	0.367
Unit conversion (lb/gallon)	7.109

Results	
Fuel Used (gallon)	10582
NOx Emissions (kg)	24.2
PM Emissions (kg)	1.9
THC Emissions (kg)	14.0
CO2 Emissions (kg)	108046.2
NOx Emission Factor (including deterioration and fuel correction factor): gram/bhp-hr	0.12
PM Emission Factor (including deterioration and fuel correction factor): gram/bhp-hr	0.01
THC Emission Factor (including deterioration and fuel correction factor): gram/ bhp-hr	0.07

\*Reference: www.epa.gov/sites/production/files/2015 07/documents/emission-factors\_2014.pdf

## Yard Tractor Operational Emissions for the Home Ave Warehouse Project

Yard Tractor Results		
Fuel Used (gallon)		10582.38659
NOx Emissions (kg)		24.19830753
PM Emissions (kg)		1.85902421
THC Emissions (kg)		13.95135453
CO2 Emissions (kg)		108046.167
NOx Emission Factor (including deterioration	on and	
fuel correction factor): gram/bhp-hr		0.1180
PM Emission Factor (including deterioratio	n and	
fuel correction factor): gram/bhp-hr		0.0091
THC Emission Factor (including deterioration	on and	
fuel correction factor): gram/ bhp-hr		0.0681
NC	Х	PM Exhaust

	-		
	Unmitigated	Unmitigated	CO2
Emissions (kg/year)	24.20	1.86	108,046.17
Emissions (lbs/year)	53.34813619	4.098446828	238201.0241
Emissions (tons/year)	0.026674068	0.002049223	—
Emissions (MT/yr)	_	_	108.0461485

Conversion factors: 1 kg = 2.2046226218 lbs 1 ton = 2,000 lbs 1 metric ton = 2,204.623 pounds Home Avenue Warehouse Project Air Quality, Health Risk Analysis, Greenhouse Gas, and Energy Technical Memorandum December 8, 2021

# ATTACHMENT B

## **Health Risk Assessment**

## Health Risk Assessment

## **Parameters and Supporting Information**









WRPLOT View - Lakes Environmental Software

## Wind Class Frequency Distribution



## Health Risk Assessment

**Operational DPM** 

DPM

-	-						
_	m	100	non	A 0.01	Im	~t10	no
г	-	155		ASS			
_				,			

Emission Factors			
	1) Truck Emissions	<ul> <li>(1) EMFAC2017 for running emiss</li> <li>(a) Calculations for</li> <li>(b) Truck Mix</li> <li>(c) Truck Idle:</li> <li>(d) Onsite Vehicle Travel Speed</li> <li>(e) Offsite Vehicle Travel Speed</li> </ul>	ions Fresno County Fleet mix consistent with the buildout year CalEEMod run EMFAC to derive the number of diesel truck vehicles 2 instances per daily trip (fueling + resting) 5 mph for trucks 25 mph for trucks
Traffic Allocation			
	1) Traffic distributio 2) Project-specific t 3) Onsite travel em 4) Onsite idling emi	n based on site layout identified in th rip generation issions generated from diesel vehicle ssions generated only by trucks	ne site plan es
Emission Source Configuration			
	1) Project onsite tru 2) Project onsite tru 3) Offsite vehicles r	ick traffic represented by a line source ick idling represented as line sources represented by a line source	ce S
Onsite Vehicle Travel Segments			
<b>Segment</b> On-site Truck Route	Source ID SLINE1	Segment Travel Distance (m) 480.9	
Onsite Truck Idling On-site Idling – Location 1 On-site Idling – Location 2 On-site Idling – Location 3 On-site Idling – Location 4	SLINE3 SLINE4 SLINE5 SLINE6	138.5 35.9 9.0 187.1	
Offsite Vehicle Travel Segments			
<b>Segment</b> Off-site Truck Route	SLINE2	Segment Travel Distance (m) 648.5	
Other Input Parameters			
Facility Operations (hr/day):	24		

Vehicle Fleet Mix

Total Daily Truck Tri	os	Trucks		Total Daily Truc	k Trips
(Trips/day)	Daily Trips	94.000		94.00	
94	Fleet Mix	100.0%		100.0%	
—					
94					
Vehicle Fleet	Trucks	Total Number	Number of	Number of	Total Number

	Trucks		Total Number	Number of	Number of	Total Number	% Diesel	% Non-	
	Project	EMFAC	of Daily Trips	Daily Diesel	Daily Non-	of Daily Trips	Trips	Diesel Trips	Total Trips
	Vehicle Mix	% Diesel		Trips	Trips				
LHDT1 (2 axle truck)	0.0%	46.2%	0	0	0	0	0.00%	0.00%	
LHDT2	0.0%	63.2%	0	0	0	0	0.00%	0.00%	
MHDT (3 axle truck)	0.0%	100.0%	0	0	0	0	0.00%	0.00%	
HHDT (4+ axle truck)	100.0%	100.0%	94	94	0	94	100.00%	0.00%	
Truck Subtotal	100.0%		94	94	0	94	100.00%	0.00%	100.00%

Truck fleet mix consistent with the project CalEEMod runs used in the Air Quality Analysis. Assumed 100% diesel for MHDT and HHDT; % Diesel taken from EMFAC2017 for LHDT1, and LHDT2.

#### Trip Distribution

Vehicle Allocation - Number of Daily Diesel Trips

Allocation of Building Trips

Percent Allocation - On-site Travel		100% <i>100%</i>	On-site Tr Total Dies	avel – Rou sel Truck Ti	ite 1 (DSL rips	trucks)								
Segment - On-site Travel On-site Truck Route	Source ID SLINE1	<b>LDA</b> 0.0	<b>LDT1</b> 0.0	<b>LDT2</b> 0.0	<b>MDT</b> 0.0	<b>LHDT1</b> 0.0	<b>LHDT2</b> 0.0	<b>MHDT</b> 0.0	<b>HHDT</b> 94.0	<b>OBUS</b> 0.0	<b>UBUS</b> 0.0	<b>SBUS</b> 0.0	<b>MH</b> 0.0	<b>Tota</b> l 94.0
Total Diesel Trucks	—	0	0	0	0	0	0	0	94	0	0	0	0	94
		50% 50% 50% 2x	On-site Id On-site Id On-site Id On-site Id <i>Total Dies</i>	ling – Loca ling – Loca ling – Loca ling – Loca sel Truck Tr	ation 1 ation 2 ation 3 ation 4 rips (One o	occurrence	per trip at p	barking are	a and one	occurrence	e in dockin	g area)		
Segment - On-site Truck Idle	Source ID	LDA	LDT1	LDT2	MDT	LHDT1	LHDT2	MHDT	HHDT	OBUS	UBUS	SBUS	мн	Total
On-site Idling – Location 1	SLINE3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.0	0.0	0.0	0.0	0.0	47.0
On-site Idling – Location 2	SLINE4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.0	0.0	0.0	0.0	0.0	47.0
On-site Idling – Location 3	SLINE5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.0	0.0	0.0	0.0	0.0	47.0
On-site Idling – Location 4	SLINE6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.0	0.0	0.0	0.0	0.0	47.0
Total Idling (Diesel Trucks Idling in Both Locations per Trip)	_	0	0	0	0	0	0	0	188	0	0	0	0	188

## **Diesel Vehicle Emissions**

**Facility Operations** 

24 hrs/day, 52 weeks/year

## Roadway Links Modeled

Link	Truck	Average Speed	Emission Factor	Trips per Daily (in	Link Length	Link Length	Ave Emissions Over Link	Ave Emissions	Average Emissions	Emissions for all Vehicles
LINK	гуре	(mpn)	(g/mi)	and out)	(m)	(mi)	(g/ɑay)	(IDS/day)	(g/sec)	(g/sec)
SLINE1	LHDT1	5	0.077	0.0	480.9	0.30	0.000E+00	0.00E+00	0.000E+00	
	LHDT2	5	0.069	0.0	480.9	0.30	0.000E+00	0.00E+00	0.000E+00	
	MHDT	5	0.007	0.0	480.9	0.30	0.000E+00	0.00E+00	0.000E+00	
	HHDT	5	0.015	94.0	480.9	0.30	4.351E-01	9.58E-04	5.036E-06	5.04E-06

### Diesel Truck Idling Emissions

Onsite Vehicle Travel Segments	Truck Type	DPM Emission Factor (grams/trip)	Number Idling Vehicle Trips/day	Emissions (g/day)	Emissions (Ib/day)	Average Emissions (g/sec)	Total Emissions for all Vehicles (g/sec)
SLINE3	LHDT1	0.001	0.0	0.00E+00	0.00E+00	0.00E+00	
	LHDT2	0.001	0.0	0.00E+00	0.00E+00	0.00E+00	
	MHDT	0.000	0.0	0.00E+00	0.00E+00	0.00E+00	
	HHDT	0.003	47.0	1.19E-01	2.62E-04	1.38E-06	1.38E-06
SLINE4	LHDT1	0.001	0.0	0.00E+00	0.00E+00	0.00E+00	
	LHDT2	0.001	0.0	0.00E+00	0.00E+00	0.00E+00	
	MHDT	0.000	0.0	0.00E+00	0.00E+00	0.00E+00	
	HHDT	0.003	47.0	1.19E-01	2.62E-04	1.38E-06	1.38E-06
SLINE5	LHDT1	0.001	0.0	0.00E+00	0.00E+00	0.00E+00	
	LHDT2	0.001	0.0	0.00E+00	0.00E+00	0.00E+00	
	MHDT	0.000	0.0	0.00E+00	0.00E+00	0.00E+00	
	HHDT	0.003	47.0	1.19E-01	2.62E-04	1.38E-06	1.38E-06
SLINE6	LHDT1	0.001	0.0	0.00E+00	0.00E+00	0.00E+00	
	LHDT2	0.001	0.0	0.00E+00	0.00E+00	0.00E+00	
	MHDT	0.000	0.0	0.00E+00	0.00E+00	0.00E+00	
	HHDT	0.003	47.0	1.19E-01	2.62E-04	1.38E-06	1.38E-06

## **Project Operations**

24 hours/day

## Offsite DSL Truck Roadway Emissions

Segment ID	Description		%	total Trips	
SLINE2	Off-site Truck Route	;		100.0%	]
			Total	100.0%	
Segment ID:	SLINE2				
Travel Distance:					
Operations	24	4 hours/day			
	Daily Trips	<b>Emission Factor</b>	Travel Distance	Emissions	Emissions
Vehicle Class	(trips/day)	(g/mi)	(mi)	(g/day)	(g/sec)
LHDT1-DSL	0	0.028	0.40	0.00	0.00E+00
LHDT2-DSL	0	0.027	0.40	0.00	0.00E+00
MHDT-DSL	0	0.003	0.40	0.00	0.00E+00
HHDT-DSL	94	0.007	0.40	0.26	3.05E-06
Total	94				3.05E-06

DPM 2023

## EMFAC Running Diesel Exhaust Emissions in units of grams/mile

EMFAC2017

			Emission Factor (g/mi)					
		5 mph	10 mph	25 mph	35 mph			
LHDT1	DSL	0.077	—	0.028				
LHDT2	DSL	0.069	—	0.027				
MHDT	DSL	0.007	—	0.003				
HHDT	DSL	0.015	—	0.007	—			

## Idling Emissions for Trucks (Emission Factors from CalEEMod) in units of grams/trip

CalEEMod.2020.4.0

	Vehicle		
	Speed	DPM	PM10
Fuel	(mph)	(grams/trip)	STREX
DSL	Idle	0.001025	0.000226
DSL	Idle	0.001408	0.000118
DSL	ldle	0.000385	0.000084
DSL	Idle	0.002530	0.000000
	Fuel DSL DSL DSL DSL	VehicleSpeedFuel(mph)DSLIdleDSLIdleDSLIdleDSLIdleDSLIdle	VehicleSpeedDPMFuel(mph)(grams/trip)DSLIdle0.001025DSLIdle0.001408DSLIdle0.000385DSLIdle0.002530

## **Health Risk Assessment**

**Health Risk Calculations** 

## Home Avenue Warehouse Project Total DPM

Home Avenue Warehouse Project Total DPM MER UTM: 257324.48, 4072070.86 257324.26, 4072085.47 257324.04, 4072100.08

		Operations	Operations	Operations	Operations	Operations
		2023	2025	2030	2040	2050
Х	Y	Total	Total	Total	Total	Total
257324.48	4072070.86	DPM	DPM	DPM	DPM	DPM
257324.26	4072085.47	(ug/m3)	(ug/m3)	(ug/m3)	(ug/m3)	(ug/m3)
257324.04	4072100.08	2.9000E-04	2.9000E-04	2.9000E-04	2.9000E-04	2.9000E-04

#### Home Avenue Warehouse Project Total DPM

70-year Lifetime Cancer Risk—DPM Operations Home Avenue Warehouse Project Total DPM MER UTM:257324.48, 4072070.86257324.28, 4072085.47257324.04, 4072100.08

		Operations 2023	Operations 2023	Operations 2024	Operations 2025	Operations 2026	Operations 2027	Operations 2028	Operations 2029	Operations 2030	Operations 2031	Operations 2032-2038	Operations 2039	Operations 2040	Operations 2041-2052	Operations 2053-2092	Total Years
Age		3rd Trimester	0-<1	1-<2	2-<3	3-<4	4-<5	5-<6	6-<7	7-<8	8-<9	9-<16	16-<17	17-<18	18-<30	30-<31	
DBR (liters/kg-	day)	361	1090	1090	631	631	631	631	631	631	631	572	261	261	261	233	
ASF		10	10	10	3	3	3	3	3	3	3	3	1	1	1	1	
TAH		1	1	1	1	1	1	1	1	1	1	1	0.73	0.73	0.73	0.73	
Duration (years	3)	0.25	1	1	1	1	1	1	1	1	1	7	1	1	12	39.75	70
Frequency (day	/s)	350	350	350	350	350	350	350	350	350	350	350	350	350	350	350	
Averaging time	(days)	25550	25550	25550	25550	25550	25550	25550	25550	25550	25550	25550	25550	25550	25550	25550	
CPF (milligrans	s/kg-day)	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
Unit Risk Facto	or (ug/m <sup>3</sup> ) <sup>-1</sup>	13.60	164.25	164.25	28.52	28.52	28.52	28.52	28.52	28.52	28.52	181.00	2.87	2.87	34.45	101.88	
Maximum DPI	M Concentratio	on (ug/m3)															
		2023															
х	Y	3rd Trimester	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032-2038	2039	2040	2041-2052	2053-2092	
257324.04	4072100.08	2.9000E-04	2.9000E-04	2.9000E-04	2.9000E-04	2.9000E-04											
Home Avenue \	Warehouse Pro	ect Total DPM MER	UTM:257324.48, 40	072070.86257324.2	6, 4072085.472573	24.04, 4072100.08											
Annual Risk (r	risk/million)																
		2023															
х	Y	3rd Trimester	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032-2038	2039	2040	2041-2052	2053-2092	Total
257324.04	4072100.08	0.0039	0.0476	0.0476	0.0083	0.0083	0.0083	0.0083	0.0083	0.0083	0.0083	0.0525	0.0008	0.0008	0.0100	0.0295	0.2508

## Home Avenue Warehouse Project Total DPM

## 70-year Lifetime Cancer Risk—DPM Operations

Home Avenue Warehouse Project Total DPM MER UTM:257324.48, 4072070.86257324.26, 4072085.47257324.04, 4072100.08

DPM 0.25 Threshold of Significance 20 Exceeds threshold? No	
0.25 Threshold of Significance 20 Exceeds threshold? No	
Threshold of Significance 20 Exceeds threshold? No	
20 Exceeds threshold? No	
Exceeds threshold? No	
No	
Estimates of Chronic Non-Cancer Hazard Index (CNCHI) Unmitigated Chronic Non-Cancer Hazard Index at the MIR	
Gillottic Noti-Galicel Flazaru filuex at the Mirk Homo Avonuo Warobouco Brojoct Total DDM MED LITM:257324 48, 4072070 86257324 26, 4072085 47257	224 04 4072400 08
Reference Exposure Level (REL) for DPM: 5 ug/m3	524.04, 4072100.08
CNCHI = DPM/REL	
Maximum Annual	
X Y Average DPM	
(m) (m) (ug/m3) CNCHI	

257324.04 4072100.08 0.000290 0.000058

Chronic Non-Cancer Hazard Index 0.000058 Threshold of Significance 1 Exceeds threshold? No

## Maximum

DPM	0.00029

	UTM	
х	Y	Latitude/Longitude
257324.48	4072070.86	36°45'48.2"N 119°43'07.4"W
257324.26	4072085.47	36°45'48.6"N 119°43'07.5"W
257324.04	4072100.08	36°45'49.1"N 119°43'07.5"W

\* AERMOD (19191): G:\HA\_HRA\Warehouse\Warehouse.isc 11/24/2021

\* AERMET (18081): 8:38:23 AM

\* MODELING OPTIONS USED: Reg DFAULT CONC ELEV URBAN ADJ\_U\*

\* PLOT FILE OF ANNUAL VALUES AVERAGED ACROSS 5 YEARS FOR SOURCE GROUP: ALL

\* FOR A TOTAL OF 658 RECEPTORS.

## \* FORMAT: (3(1X,F13.5),3(1X,F8.2),2X,A6,2X,A8,2X,I8.8,2X,A8)

x	Y	AVERAGE CONC	ZELEV	ZHILL	ZFLAG	AVE	GRP	NUM YRS	NET ID
257814.5	4071798.84	0.00013	98.87	98.87	0	ANNUAL	ALL	5	
257801.58	4071793.36	0.00012	98.85	98.85	0	ANNUAL	ALL	5	
257764.54	4071776.87	0.00011	98.79	98.79	0	ANNUAL	ALL	5	
257749.93	4071776.71	0.00010	98.77	98.77	0	ANNUAL	ALL	5	
257735.32	4071776.54	0.00010	98.75	98.75	0	ANNUAL	ALL	5	
257720.71	4071776.37	0.00010	98.73	98.73	0	ANNUAL	ALL	5	
257706.11	4071776.21	0.00010	98.7	98.7	0	ANNUAI	ALL	5	
257691 5	4071776.04	0.00010	98.68	98.68	0		ALL	5	
257676.89	4071775.88	0.00009	98.65	98.65	0		ALL	5	
257662.28	4071775 71	0.00009	98.62	98.62	0			5	
257647 67	4071775.54	0.00009	98.6	98.6	0			5	
257047.07	4071775.34	0.00009	00 E0	00 E0	0		ALL	5	
257055.00	4071775.30	0.00009	90.50 00 FC	90.50 00 FC	0	ANNUAL	ALL	5	
	4071775.21	0.00008	98.50	98.50	0		ALL	5	
257603.85	4071775.04	0.00008	98.54	98.54	0	ANNUAL	ALL	5	
257589.24	4071774.88	0.00008	98.52	98.52	0	ANNUAL	ALL	5	
257574.63	40/1//4./1	0.00008	98.5	98.5	0	ANNUAL	ALL	5	
257560.02	40/1//4.55	0.00007	98.48	98.48	0	ANNUAL	ALL	5	
257814.52	4071768.7	0.00011	98.84	98.84	0	ANNUAL	ALL	5	
257827.11	4071774.04	0.00011	98.86	98.86	0	ANNUAL	ALL	5	
257839.71	4071779.39	0.00012	98.88	98.88	0	ANNUAL	ALL	5	
257852.3	4071784.73	0.00012	98.9	98.9	0	ANNUAL	ALL	5	
257864.9	4071790.08	0.00013	98.93	98.93	0	ANNUAL	ALL	5	
257877.49	4071795.42	0.00013	98.95	98.95	0	ANNUAL	ALL	5	
257801.92	4071763.36	0.00010	98.82	98.82	0	ANNUAL	ALL	5	
257787.31	4071763.19	0.00010	98.81	98.81	0	ANNUAL	ALL	5	
257772.71	4071763.02	0.00010	98.79	98.79	0	ANNUAL	ALL	5	
257758.1	4071762.86	0.00010	98.77	98.77	0	ANNUAL	ALL	5	
257743.49	4071762.69	0.00010	98.75	98.75	0	ANNUAL	ALL	5	
257728.88	4071762.53	0.00009	98.73	98.73	0	ANNUAL	ALL	5	
257714.27	4071762.36	0.00009	98.71	98.71	0	ANNUAL	ALL	5	
257699.67	4071762.19	0.00009	98.69	98.69	0	ANNUAL	ALL	5	
257685.06	4071762.03	0.00009	98.66	98.66	0	ANNUAL	ALL	5	
257670.45	4071761.86	0.00009	98.63	98.63	0	ANNUAL	ALL	5	
257655.84	4071761.69	0.00008	98.6	98.6	0	ANNUAL	ALL	5	
257641.23	4071761.53	0.00008	98.58	98.58	0	ANNUAI	ALL	5	
257626.63	4071761 36	0.00008	98 56	98 56	0		ALL	5	
257612.02	4071761.30	0.00008	98 55	98.50	0			5	
257597 /1	4071761.03	0.00000	98.55	98.55	0			5	
257582.8	4071760.86	0.00007	98.5	98.52	0			5	
257562.0	4071760.30	0.00007	08.19	08.18	0			5	
257500.13	40/1/00./	0.00007	00.40	00.40	0			5	
23/013.30	40/1/38.93	0.00009	70.01 70.01	70.01 70.01	0		ALL	5	
23/828.5	40/1/44.49	0.00010	98.83	98.83	U	ANNUAL	ALL	5	
25/841.62	40/1/50.06	0.00010	98.85	98.85	U	ANNUAL	ALL	5	
257854.74	40/1/55.62	0.00011	98.87	98.87	U	ANNUAL	ALL	5	
25/86/.86	40/1761.19	0.00011	98.9	98.9	0	ANNUAL	ALL	5	
257880.98	4071766.76	0.00011	98.92	98.92	0	ANNUAL	ALL	5	

257004 1	4071772.22	0.00012	00.05	00.05	0	A N I N I I A I		-
257894.1	40/1//2.32	0.00012	98.95	98.95	0	ANNUAL	ALL	5
257907.22	4071777.89	0.00012	98.97	98.97	0	ANNUAL	ALL	5
257920.34	4071783.46	0.00012	99	99	0	ANNUAL	ALL	5
257933.47	4071789.02	0.00013	99.02	99.02	0	ANNUAL	ALL	5
257946.59	4071794.59	0.00013	99.05	99.05	0	ANNUAL	ALL	5
257802.26	4071733.36	0.00009	98.79	98.79	0	ANNUAL	ALL	5
257787.66	4071733.19	0.00009	98.77	98.77	0	ANNUAL	ALL	5
257773.05	4071733 03	0.00009	98.76	98.76	0		AL 1	5
257775.05	4071733.03	0.00005	08.70	08.70	0			5
257758.44	4071732.80	0.00008	98.74	98.74	0	ANNUAL	ALL	5
257743.83	40/1/32.69	0.00008	98.72	98.72	0	ANNUAL	ALL	5
257729.22	4071732.53	0.00008	98.7	98.7	0	ANNUAL	ALL	5
257714.62	4071732.36	0.00008	98.68	98.68	0	ANNUAL	ALL	5
257700.01	4071732.2	0.00008	98.66	98.66	0	ANNUAL	ALL	5
257685.4	4071732.03	0.00007	98.64	98.64	0	ANNUAL	ALL	5
257670.79	4071731.86	0.00007	98.61	98.61	0	ANNUAL	ALL	5
257656.18	4071731.7	0.00007	98.59	98.59	0	ANNUAL	ALL	5
257641 57	4071731 53	0.00007	98 56	98 56	0	ΔΝΝΠΔΙ	ΔΠ	5
257676.07	4071721 26	0.00007	08 54	08 54	0			5
257020.37	4071731.30	0.00007	98.54	98.54	0	ANNUAL	ALL	5
25/612.36	4071731.2	0.00007	98.52	98.52	0	ANNUAL	ALL	5
25/59/./5	40/1/31.03	0.00006	98.5	98.5	0	ANNUAL	ALL	5
257583.14	4071730.87	0.00006	98.48	98.48	0	ANNUAL	ALL	5
257568.53	4071730.7	0.00006	98.46	98.46	0	ANNUAL	ALL	5
257815.81	4071701.43	0.00008	98.78	98.78	0	ANNUAL	ALL	5
257828.93	4071706.99	0.00008	98.79	98.79	0	ANNUAL	ALL	5
257842.05	4071712.56	0.00009	98.81	98.81	0	ANNUAL	ALL	5
257855.17	4071718.13	0.00009	98.83	98.83	0	ANNUAL	ALL	5
257868 29	4071723 69	0.00009	98.86	98.86	0	ΔΝΝΠΔΙ	ΔΠ	5
257000.25	4071720.05	0.00000	08.88	08.88	0			5
257881.41	4071729.20	0.00010	98.88	98.88	0	ANNUAL	ALL	5
257894.55	4071734.83	0.00010	98.9	98.9	0	ANNUAL	ALL	5
25/90/.65	40/1/40.39	0.00010	98.93	98.93	0	ANNUAL	ALL	5
257920.77	4071745.96	0.00011	98.96	98.96	0	ANNUAL	ALL	5
257933.89	4071751.52	0.00011	98.98	98.98	0	ANNUAL	ALL	5
257947.01	4071757.09	0.00011	99.01	99.01	0	ANNUAL	ALL	5
257960.13	4071762.66	0.00011	99.03	99.03	0	ANNUAL	ALL	5
257973.25	4071768.22	0.00012	99.06	99.06	0	ANNUAL	ALL	5
257986.37	4071773.79	0.00012	99.08	99.08	0	ANNUAL	ALL	5
257999.49	4071779.35	0.00012	99.1	99.1	0	ANNUAL	ALL	5
258012 61	4071784 92	0.00012	99.12	99.12	0	ANNUA	ΔΠ	5
258012.01	4071700.02	0.00012	00 1/	00.14	0			5
258025.75	4071790.49	0.00012	99.14 00.70	99.14	0	ANNUAL	ALL	5
257802.69	4071695.86	0.00008	98.76	98.76	0	ANNUAL	ALL	5
257788.08	4071695.7	0.00007	98.74	98.74	0	ANNUAL	ALL	5
257773.47	4071695.53	0.00007	98.72	98.72	0	ANNUAL	ALL	5
257758.87	4071695.36	0.00007	98.7	98.7	0	ANNUAL	ALL	5
257744.26	4071695.2	0.00007	98.68	98.68	0	ANNUAL	ALL	5
257729.65	4071695.03	0.00007	98.67	98.67	0	ANNUAL	ALL	5
257715.04	4071694.86	0.00007	98.65	98.65	0	ANNUAL	ALL	5
257700.43	4071694.7	0.00006	98.63	98.63	0	ANNUAL	ALL	5
257685.83	4071694.53	0.00006	98.61	98.61	0	ANNUAL	ALL	5
257671 22	4071694 37	0,00006	98 59	98 59	0	ANNUA	ΔΠ	5
257656 61	1071694 2	0.00006	98.55	98 56	0		AL 1	5
257642	4071604.02	0.00000	08 53	08 52	0			5
257042	4071034.03	0.00000	98.55	98.55	0	ANNUAL	ALL	5
257627.39	4071693.87	0.00006	98.51	98.51	0	ANNUAL	ALL	5
257612.79	4071693.7	0.00006	98.49	98.49	0	ANNUAL	ALL	5
257598.18	4071693.53	0.00005	98.47	98.47	0	ANNUAL	ALL	5
257583.57	4071693.37	0.00005	98.45	98.45	0	ANNUAL	ALL	5
257568.96	4071693.2	0.00005	98.43	98.43	0	ANNUAL	ALL	5
257816.24	4071663.93	0.00007	98.74	98.74	0	ANNUAL	ALL	5
257829.36	4071669.5	0.00007	98.76	98.76	0	ANNUAL	ALL	5
257842.48	4071675.06	0.00007	98.78	98.78	0	ANNUAL	ALL	5
257855.6	4071680.63	0.00008	98.8	98.8	0	ANNUAL	ALL	5
257868 72	4071686.2	0.00008	98.82	98.82	0	ANNUAI	ALI	5
257881 84	4071691 76	0 00008	98 84	98 84	0		Δ11	5
25780/ 06	4071607 22	0.00000	02 27	98.04	n			5
201034.30		0.00000	50.07	20.07	U	ANNUAL	ALL	5

257000.00	4074702.00	0.00000	00.00	00.00	•			-
25/908.08	40/1/02.89	0.00009	98.89	98.89	0	ANNUAL	ALL	5
257921.2	4071708.46	0.00009	98.92	98.92	0	ANNUAL	ALL	5
257934.32	4071714.03	0.00009	98.95	98.95	0	ANNUAL	ALL	5
257947.44	4071719.59	0.00010	98.97	98.97	0	ANNUAL	ALL	5
257960.56	4071725.16	0.00010	99	99	0	ANNUAL	ALL	5
257973.68	4071730.72	0.00010	99.02	99.02	0	ANNUAL	ALL	5
257986.8	4071736.29	0.00010	99.04	99.04	0	ANNUAL	ALL	5
257999.92	4071741.86	0.00010	99.06	99.06	0	ANNUAI	ALL	5
258013.04	1071747 42	0.00010	99.00	99.08	0			5
250015.04	4071752.00	0.00010	00.11	00.11	0			5
250020.10	4071752.99	0.00011	99.11	99.11	0		ALL	5
258039.28	40/1/58.50	0.00011	99.13	99.13	0	ANNUAL	ALL	5
258052.4	40/1/64.12	0.00011	99.15	99.15	0	ANNUAL	ALL	5
258070.94	4071782.87	0.00011	99.2	99.2	0	ANNUAL	ALL	5
257803.12	4071658.36	0.00006	98.72	98.72	0	ANNUAL	ALL	5
257788.51	4071658.2	0.00006	98.7	98.7	0	ANNUAL	ALL	5
257773.9	4071658.03	0.00006	98.68	98.68	0	ANNUAL	ALL	5
257759.29	4071657.87	0.00006	98.66	98.66	0	ANNUAL	ALL	5
257744.68	4071657.7	0.00006	98.64	98.64	0	ANNUAL	ALL	5
257730.08	4071657.53	0.00006	98.63	98.63	0	ANNUAL	ALL	5
257715.47	4071657.37	0.00006	98.61	98.61	0	ANNUAL	ALL	5
257700.86	4071657.2	0.00005	98.6	98.6	0	ANNUAL	ALL	5
257686.25	4071657.03	0.00005	98.58	98.58	0	ANNUAL	ALL	5
257671.64	4071656.87	0.00005	98.55	98.55	0	ANNUAL	ALL	5
257657 04	4071656 7	0.00005	98 53	98 53	0		ALL	5
257642.43	4071656 54	0.00005	98 51	98.53	0			5
257677 82	4071656 37	0.00005	98.91	98.91	0			5
257627.82	4071656.37	0.00005	08.45	08.45	0			5
257015.21	4071050.2	0.00005	98.40	98.40	0		ALL	5
257596.0	4071050.04	0.00005	90.44	96.44	0	ANNUAL	ALL	5
257584	40/1655.8/	0.00005	98.42	98.42	0	ANNUAL	ALL	5
257569.39	40/1655./	0.00004	98.4	98.4	0	ANNUAL	ALL	5
25/816.66	40/1626.43	0.00006	98.7	98.7	0	ANNUAL	ALL	5
25/829./8	40/1632	0.00006	98.72	98.72	0	ANNUAL	ALL	5
257842.9	4071637.57	0.00006	98.74	98.74	0	ANNUAL	ALL	5
257856.02	4071643.13	0.00006	98.76	98.76	0	ANNUAL	ALL	5
257869.14	4071648.7	0.00007	98.78	98.78	0	ANNUAL	ALL	5
257882.26	4071654.26	0.00007	98.8	98.8	0	ANNUAL	ALL	5
257895.38	4071659.83	0.00007	98.83	98.83	0	ANNUAL	ALL	5
257908.51	4071665.4	0.00008	98.86	98.86	0	ANNUAL	ALL	5
257921.63	4071670.96	0.00008	98.89	98.89	0	ANNUAL	ALL	5
257934.75	4071676.53	0.00008	98.91	98.91	0	ANNUAL	ALL	5
257947.87	4071682.09	0.00008	98.93	98.93	0	ANNUAL	ALL	5
257960.99	4071687.66	0.00009	98.96	98.96	0	ANNUAL	ALL	5
257974.11	4071693.23	0.00009	98.98	98.98	0	ANNUAL	ALL	5
257987.23	4071698.79	0.00009	99	99	0	ANNUAL	ALL	5
258000.35	4071704.36	0.00009	99.03	99.03	0	ANNUAL	ALL	5
258013.47	4071709.93	0.00009	99.05	99.05	0	ANNUAL	ALL	5
258026 59	4071715 49	0.00009	99.08	99.08	0		ALL	5
258039 71	4071721.06	0.00009	99.1	99.1	0		ALL	5
258052.83	1071726.62	0.00010	99.1	99.12	0 0			5
258065.05	4071720.02	0.00010	00.14	00.14	0			5
258005.95	4071732.19	0.00010	99.14 00.17	99.14	0		ALL	5
258079.07	4071757.70	0.00010	99.17	99.17	0		ALL	5
258097.0	40/1/50.51	0.00010	99.2	99.2	0	ANNUAL	ALL	5
258103.02	40/1/69.69	0.00010	99.23	99.23	0	ANNUAL	ALL	5
258108.44	40/1/82.8/	0.00010	99.25	99.25	0	ANNUAL	ALL	5
257803.54	40/1620.8/	0.00006	98.68	98.68	0	ANNUAL	ALL	5
257788.94	4071620.7	0.00005	98.67	98.67	0	ANNUAL	ALL	5
257774.33	4071620.53	0.00005	98.64	98.64	0	ANNUAL	ALL	5
257759.72	4071620.37	0.00005	98.62	98.62	0	ANNUAL	ALL	5
257745.11	4071620.2	0.00005	98.61	98.61	0	ANNUAL	ALL	5
257730.5	4071620.04	0.00005	98.59	98.59	0	ANNUAL	ALL	5
257715.9	4071619.87	0.00005	98.57	98.57	0	ANNUAL	ALL	5
257701.29	4071619.7	0.00005	98.55	98.55	0	ANNUAL	ALL	5
257686.68	4071619.54	0.00005	98.54	98.54	0	ANNUAL	ALL	5

257672.07	4071619.37	0.00004	98.52	98.52	0	ANNUAL	ALL	5
257657.46	4071619.2	0.00004	98.5	98.5	0	ANNUAL	ALL	5
257642.85	4071619.04	0.00004	98.48	98.48	0	ANNUAL	ALL	5
257628.25	4071618.87	0.00004	98.46	98.46	0	ANNUAL	ALL	5
257613.64	4071618.71	0.00004	98.44	98.44	0	ANNUAL	ALL	5
257599.03	4071618.54	0.00004	98.41	98.41	0	ANNUAL	ALL	5
257584.42	4071618.37	0.00004	98.39	98.39	0	ANNUAL	ALL	5
257569.81	4071618.21	0.00004	98.37	98.37	0	ANNUAL	ALL	5
257817.09	4071588.94	0.00005	98.67	98.67	0	ANNUAL	ALL	5
257830 21	4071594 5	0.00005	98.69	98.69	0			5
257843 33	4071600.07	0.00005	98.7	98.7	0		ALL	5
257856 45	4071605.63	0.00006	98 72	98.72	0 0			5
257850.45	4071611 2	0.00000	08.72	08.72	0			5
257805.57	4071011.2	0.00000	98.74	98.74	0		ALL	5
257882.09	4071010.77	0.00006	98.77	98.77	0	ANNUAL	ALL	5
257895.81	4071622.33	0.00006	98.79	98.79	0	ANNUAL	ALL	5
257908.93	40/162/.9	0.00007	98.82	98.82	0	ANNUAL	ALL	5
25/922.05	4071633.46	0.00007	98.85	98.85	0	ANNUAL	ALL	5
257935.17	4071639.03	0.00007	98.88	98.88	0	ANNUAL	ALL	5
257948.29	4071644.6	0.00007	98.9	98.9	0	ANNUAL	ALL	5
257961.41	4071650.16	0.00007	98.92	98.92	0	ANNUAL	ALL	5
257974.53	4071655.73	0.00008	98.95	98.95	0	ANNUAL	ALL	5
257987.65	4071661.3	0.00008	98.97	98.97	0	ANNUAL	ALL	5
258000.77	4071666.86	0.00008	98.99	98.99	0	ANNUAL	ALL	5
258013.89	4071672.43	0.00008	99.01	99.01	0	ANNUAL	ALL	5
258027.01	4071677.99	0.00008	99.04	99.04	0	ANNUAL	ALL	5
258040.13	4071683.56	0.00008	99.06	99.06	0	ANNUAL	ALL	5
258053.25	4071689.13	0.00009	99.08	99.08	0	ANNUAL	ALL	5
258066.37	4071694.69	0.00009	99.11	99.11	0	ANNUAL	ALL	5
258079.49	4071700.26	0.00009	99.13	99.13	0	ANNUAL	ALL	5
258092.61	4071705.83	0.00009	99.15	99.15	0	ANNUAI	ALL	5
258105 73	4071711 39	0.00009	99 17	99.17	0		ALL	5
258124 27	4071730 14	0.00009	99.22	99.27	0			5
258129.27	4071730.14	0.00009	00.24	00.24	0			5
258125.05	4071745.52	0.00009	00.26	99.24	0		ALL	5
250155.1	4071750.51	0.00009	99.20	99.20	0		ALL	5
258140.52	4071709.09	0.00009	99.28	99.28	0	ANNUAL	ALL	5
258145.94	40/1/82.8/	0.00009	99.3	99.3	0	ANNUAL	ALL	5
257803.97	40/1583.3/	0.00005	98.65	98.65	0	ANNUAL	ALL	5
257789.36	40/1583.2	0.00005	98.63	98.63	0	ANNUAL	ALL	5
25///4./5	40/1583.04	0.00005	98.61	98.61	0	ANNUAL	ALL	5
257760.15	4071582.87	0.00004	98.59	98.59	0	ANNUAL	ALL	5
257745.54	4071582.7	0.00004	98.57	98.57	0	ANNUAL	ALL	5
257730.93	4071582.54	0.00004	98.55	98.55	0	ANNUAL	ALL	5
257716.32	4071582.37	0.00004	98.53	98.53	0	ANNUAL	ALL	5
257701.71	4071582.21	0.00004	98.51	98.51	0	ANNUAL	ALL	5
257687.11	4071582.04	0.00004	98.5	98.5	0	ANNUAL	ALL	5
257672.5	4071581.87	0.00004	98.48	98.48	0	ANNUAL	ALL	5
257657.89	4071581.71	0.00004	98.46	98.46	0	ANNUAL	ALL	5
257643.28	4071581.54	0.00004	98.44	98.44	0	ANNUAL	ALL	5
257628.67	4071581.37	0.00004	98.42	98.42	0	ANNUAL	ALL	5
257614.07	4071581.21	0.00004	98.4	98.4	0	ANNUAL	ALL	5
257599.46	4071581.04	0.00004	98.38	98.38	0	ANNUAL	ALL	5
257584.85	4071580.88	0.00003	98.36	98.36	0	ANNUAL	ALL	5
257570.24	4071580.71	0.00003	98.34	98.34	0	ANNUAL	ALL	5
257330.73	4072014.09	0.00021	98.17	98.17	0	ANNUAI	ALL	5
257332 01	4071992 12	0.00017	98 17	98.17	n n	ANNUAL	ALL	5
257332 43	4071974 01	0 00014	98 16	98.16	n			5
257325 15	4072027 04	0.00014	00.10	08 16	0			5
257325.15	4072027.04	0.00025	00 16	00 1 <i>C</i>	0			5 F
231324.33	407205626	0.00020	50.10 09.16	30.10 00.1 <i>C</i>	0			Г
23/324./	4072030.20	0.00028	90.10	30.10	0		ALL	5 -
25/324.48	40/20/0.86	0.00029	98.10	98.10	0	ANNUAL	ALL	5
25/324.20	4072085.47	0.00029	98.17	98.17	U	ANNUAL	ALL	5
25/324.04	4072100.08	0.00029	98.18	98.18	U	ANNUAL	ALL	5
25/300.59	40/2013.96	0.00016	98.1	98.1	0	ANNUAL	ALL	5

257306.03	4072001.34	0.00015	98.11	98.11	0	ANNUAL	ALL	5
257311.47	4071988.72	0.00014	98.12	98.12	0	ANNUAL	ALL	5
257316.91	4071976.09	0.00013	98.13	98.13	0	ANNUAL	ALL	5
257322.35	4071963.47	0.00012	98.14	98.14	0	ANNUAL	ALL	5
257327.79	4071950.85	0.00011	98.14	98.14	0	ANNUAL	ALL	5
257333.23	4071938.22	0.00011	98.15	98.15	0	ANNUAL	ALL	5
257498.55	4071775	0.00007	98.39	98.39	0	ANNUAL	ALL	5
257504 38	4071786 21	0.00007	98 41	98 41	0			5
257501.30	4071781 11	0.00007	98.42	98.42	0			5
257529.9	4071776.01	0.00007	90.42 98 11	98.42	0			5
257542 67	4071770.01	0.00007	98.44	98.45	0			5
257542.07	4071765 9	0.00007	00.4J	98.45 09.47	0			5
257555.45	4071705.6	0.00007	90.47 00.1	90.47	0		ALL	5
257295.15	4072026.58	0.00016	98.1	98.1	0	ANNUAL	ALL	5
257294.93	4072041.19	0.00017	98.11	98.11	0	ANNUAL	ALL	5
257294.71	4072055.8	0.00018	98.11	98.11	0	ANNUAL	ALL	5
257294.49	4072070.41	0.00019	98.11	98.11	0	ANNUAL	ALL	5
257294.26	4072085.02	0.00020	98.12	98.12	0	ANNUAL	ALL	5
257294.04	4072099.63	0.00020	98.13	98.13	0	ANNUAL	ALL	5
257270.82	4072012.98	0.00012	98.05	98.05	0	ANNUAL	ALL	5
257276.49	4071999.83	0.00012	98.06	98.06	0	ANNUAL	ALL	5
257282.15	4071986.68	0.00012	98.06	98.06	0	ANNUAL	ALL	5
257287.82	4071973.53	0.00011	98.06	98.06	0	ANNUAL	ALL	5
257293.49	4071960.39	0.00010	98.07	98.07	0	ANNUAL	ALL	5
257299.16	4071947.24	0.00010	98.08	98.08	0	ANNUAL	ALL	5
257304.82	4071934.09	0.00009	98.09	98.09	0	ANNUAL	ALL	5
257310.49	4071920.94	0.00009	98.09	98.09	0	ANNUAL	ALL	5
257316.16	4071907.79	0.00008	98.1	98.1	0	ANNUAL	ALL	5
257312.31	4071878.96	0.00007	98.08	98.08	0	ANNUAL	ALL	5
257317.98	4071865.82	0.00007	98.09	98.09	0	ANNUAL	ALL	5
257382.41	4071805.12	0.00006	98.2	98.2	0	ANNUAL	ALL	5
257395.71	4071799.8	0.00006	98.22	98.22	0	ANNUAL	ALL	5
257409	4071794.49	0.00006	98.25	98.25	0	ANNUAL	ALL	5
257422.3	4071789.17	0.00006	98.27	98.27	0	ANNUAL	ALL	5
257435.59	4071783.86	0.00006	98.29	98.29	0	ANNUAL	ALL	5
257448.88	4071778.54	0.00006	98.31	98.31	0	ANNUAL	ALL	5
257462.18	4071773.22	0.00006	98.33	98.33	0	ANNUAL	ALL	5
257475.47	4071767.91	0.00006	98.35	98.35	0	ANNUAL	ALL	5
257488.77	4071762.59	0.00006	98.36	98.36	0	ANNUAL	ALL	5
257502.06	4071757.28	0.00006	98.38	98.38	0	ANNUAL	ALL	5
257515.36	4071751.96	0.00006	98.4	98.4	0	ANNUAI	ALL	5
257528.65	4071746.65	0.00006	98.42	98.42	0	ANNUAL	ALL	5
257541.95	4071741.33	0.00006	98.43	98.43	0	ANNUAI	ALL	5
257555 24	4071736.02	0.00006	98.45	98.45	0			5
257265 15	4072026 13	0.00013	98.05	98.05	0			5
257264 93	4072040 74	0.00013	98.05	98.05	0			5
257264.33	4072055 34	0.00013	98.06	98.06	0			5
257264.71	4072059.94	0.00014	98.08	98.08	0			5
257264.45	4072084 56	0.00014	90.00	98.00	0			5
257264.05	4072009.17	0.00015	08 1	08.05	0			5
257204.05	4072033.17	0.00015	90.1 00 1E	90.1 09.1E	0			5
257203.38	4072142.99	0.00015	00.10	98.15	0			5
257205.10	4072137.0	0.00013	00	00	0			5
257255.55	4072012.41	0.00010	90	90	0		ALL	5
251250.99	4071096 11	0.00010	<u> 70</u>	70 09	0			5
23/244.00	4071072.06	0.00009	20	30 08	0			Э F
23/230.33	40/19/2.90	0.00009	30	30	0			Э г
25/255.99	4071939.82	0.00009	98 00.01	90 00 01	0	ANNUAL	ALL	э г
25/201.00	40/1946.6/	0.00008	98.01	98.01 98.02	0	ANNUAL	ALL	5 -
25/26/.33	40/1933.52	0.00008	98.02	98.02	U	ANNUAL	ALL	5
25/2/2.99	40/1920.3/	0.00008	98.02	98.02	U	ANNUAL	ALL	5
25/2/8.66	40/1907.22	0.00007	98.02	98.02	U	ANNUAL	ALL	5
25/284.33	40/1894.07	0.0000/	98.03	98.03	0	ANNUAL	ALL	5
257289.99	4071880.92	0.00007	98.04	98.04	0	ANNUAL	ALL	5
257295.66	4071867.78	0.00006	98.05	98.05	0	ANNUAL	ALL	5

257301.33	4071854.63	0.00006	98.05	98.05	0	ANNUAL	ALL	5
257306.99	4071841.48	0.00006	98.06	98.06	0	ANNUAL	ALL	5
257302.65	4071804.56	0.00005	98.04	98.04	0	ANNUAL	ALL	5
257323.99	4071802.03	0.00005	98.07	98.07	0	ANNUAL	ALL	5
257382.84	4071767.62	0.00005	98.18	98.18	0	ANNUAL	ALL	5
257396.13	4071762.31	0.00005	98.2	98.2	0	ANNUAL	ALL	5
257409 43	1071756.99	0.00005	98.73	98.73	0		AL 1	5
257405.45	4071751.67	0.00005	08.25	08.25	0			5
257422.72	40/1/51.0/	0.00005	98.25	98.25	0	ANNUAL	ALL	5
257436.02	40/1/46.36	0.00005	98.27	98.27	0	ANNUAL	ALL	5
257449.31	4071741.04	0.00005	98.29	98.29	0	ANNUAL	ALL	5
257462.61	4071735.73	0.00005	98.3	98.3	0	ANNUAL	ALL	5
257475.9	4071730.41	0.00005	98.32	98.32	0	ANNUAL	ALL	5
257489.19	4071725.1	0.00005	98.34	98.34	0	ANNUAL	ALL	5
257502.49	4071719.78	0.00005	98.36	98.36	0	ANNUAL	ALL	5
257515.78	4071714.46	0.00005	98.37	98.37	0	ANNUAI	ALL	5
257529.08	4071709 15	0.00005	98.39	98.39	0			5
257542 27	1071702 82	0.00005	08 /1	08 /1	0		ALL	5
257542.57	4071703.83	0.00005	98.41	98.41	0	ANNUAL	ALL	5
25/555.0/	4071698.52	0.00005	98.42	98.42	0	ANNUAL	ALL	5
25/22/.66	4072025.56	0.00010	98	98	0	ANNUAL	ALL	5
257227.44	4072040.17	0.00010	98.01	98.01	0	ANNUAL	ALL	5
257227.22	4072054.78	0.00011	98.02	98.02	0	ANNUAL	ALL	5
257226.99	4072069.38	0.00011	98.04	98.04	0	ANNUAL	ALL	5
257226.77	4072083.99	0.00011	98.05	98.05	0	ANNUAL	ALL	5
257226.55	4072098.6	0.00012	98.07	98.07	0	ANNUAL	ALL	5
257225.89	4072142.43	0.00012	98.14	98.14	0	ANNUAL	ALL	5
257225.66	4072157 03	0.00012	98.16	98.16	0			5
257225.00	4072011 84	0.00012	97.95	97.95	0 0		AL 1	5
257155.05	4072011.04	0.00008	07.04	07.04	0			5
257201.5	4071998.69	0.00008	97.94	97.94	0	ANNUAL	ALL	5
257207.16	4071985.54	0.00008	97.94	97.94	0	ANNUAL	ALL	5
257212.83	4071972.4	0.00008	97.94	97.94	0	ANNUAL	ALL	5
257218.5	4071959.25	0.00008	97.94	97.94	0	ANNUAL	ALL	5
257224.16	4071946.1	0.00007	97.94	97.94	0	ANNUAL	ALL	5
257229.83	4071932.95	0.00007	97.95	97.95	0	ANNUAL	ALL	5
257235.5	4071919.8	0.00007	97.95	97.95	0	ANNUAL	ALL	5
257241.16	4071906.65	0.00007	97.95	97.95	0	ANNUAL	ALL	5
257246.83	4071893.5	0.00006	97.96	97.96	0	ANNUAL	ALL	5
257252.5	4071880.36	0.00006	97.96	97.96	0	ANNUAL	ALL	5
257258 16	4071867 21	0.00006	97 97	97 97	0	ANNUA	ΔΠ	5
257250.10	4071854.06	0.00006	97.97	97.97	0		ALL	5
257205.85	4071834.00	0.00000	97.97	97.97	0	ANNUAL	ALL	5
257269.5	4071840.91	0.00005	97.98	97.98	0	ANNUAL	ALL	5
257280.83	4071814.61	0.00005	98	98	0	ANNUAL	ALL	5
257286.5	4071801.46	0.00005	98.01	98.01	0	ANNUAL	ALL	5
257292.17	4071788.32	0.00005	98.01	98.01	0	ANNUAL	ALL	5
257297.83	4071775.17	0.00004	98.01	98.01	0	ANNUAL	ALL	5
257316.79	4071756.7	0.00004	98.04	98.04	0	ANNUAL	ALL	5
257383.27	4071730.12	0.00004	98.16	98.16	0	ANNUAL	ALL	5
257396.56	4071724.81	0.00004	98.18	98.18	0	ANNUAL	ALL	5
257409.85	4071719.49	0.00004	98.2	98.2	0	ANNUAL	ALL	5
257423 15	4071714 18	0 00004	98.22	98.22	0	ANNUA	ΔΠ	5
257/36//	/071708 86	0.00004	98.24	98.24	0		AL 1	5
257430.44	4071702.55	0.00004	08.24	08.24	0			5
257449.74	4071703.33	0.00004	98.20	98.20	0	ANNUAL	ALL	5
257463.03	4071698.23	0.00004	98.28	98.28	0	ANNUAL	ALL	5
25/4/6.33	4071692.91	0.00004	98.3	98.3	0	ANNUAL	ALL	5
257489.62	4071687.6	0.00004	98.31	98.31	0	ANNUAL	ALL	5
257502.92	4071682.28	0.00004	98.33	98.33	0	ANNUAL	ALL	5
257516.21	4071676.97	0.00004	98.35	98.35	0	ANNUAL	ALL	5
257529.5	4071671.65	0.00004	98.36	98.36	0	ANNUAL	ALL	5
257542.8	4071666.34	0.00004	98.37	98.37	0	ANNUAL	ALL	5
257556.09	4071661.02	0.00004	98.39	98.39	0	ANNUAL	ALL	5
257190.16	4072024.99	0.00008	97.96	97.96	0	ANNUAL	ALL	5
257189.94	4072039.6	0.00009	97.97	97.97	0	ANNUAI	ALI	5
257189 72	4072054 21	0 00009	97 98	97 98	0		Δ11	5
257189 5	4072068 02	0.00000	02 02	0R	n			5
2J110J.J	HU12000.02	0.00009	50	50	U	ANNUAL	ALL	5

257189.28	4072083.42	0.00009	98.03	98.03	0	ANNUAL	ALL	5
257189.05	4072098.03	0.00009	98.05	98.05	0	ANNUAL	ALL	5
257187.95	4072171.07	0.00009	98.17	98.17	0	ANNUAL	ALL	5
257187.72	4072185.68	0.00009	98.2	98.2	0	ANNUAL	ALL	5
257187.5	4072200.29	0.00009	98.23	98.23	0	ANNUAL	ALL	5
257158.33	4072011.27	0.00007	97.91	97.91	0	ANNUAL	ALL	5
257164	4071998.12	0.00007	97.9	97.9	0	ANNUAL	ALL	5
257169.67	4071984.98	0.00007	97.89	97.89	0	ANNUAL	ALL	5
257175.33	4071971.83	0.00007	97.89	97.89	0	ANNUAL	ALL	5
257181	4071958.68	0.00007	97.89	97.89	0	ANNUAL	ALL	5
257186.67	4071945.53	0.00006	97.88	97.88	0	ANNUAL	ALL	5
257192.33	4071932.38	0.00006	97.88	97.88	0	ANNUAL	ALL	5
257198	4071919.23	0.00006	97.88	97.88	0	ANNUAL	ALL	5
257203.67	4071906.08	0.00006	97.89	97.89	0	ANNUAI	ALL	5
257209 34	4071892 94	0.00006	97.9	97.9	0		ALL	5
257215	4071879 79	0.00006	97.9	97.9	0		ALL	5
257220.67	4071866 64	0.00005	97.9	97.9	0			5
257226.37	4071853 49	0.00005	97.9	97.9	0			5
257220.54	4071840 24	0.00005	07.01	07.01	0			5
257252	4071840.34	0.00005	07.02	97.91	0			5
257245.54	4071014.04	0.00003	97.95	97.95	0			5
257245	4071000.09	0.00004	97.95	97.95	0		ALL	5
257254.07	40/1/8/./5	0.00004	97.95	97.93	0	ANNUAL	ALL	5
257260.34	40/1//4.6	0.00004	97.94	97.94	0	ANNUAL	ALL	5
257266	40/1/61.45	0.00004	97.94	97.94	0	ANNUAL	ALL	5
25/2/1.6/	40/1/48.3	0.00004	97.95	97.95	0	ANNUAL	ALL	5
257290.63	4071729.84	0.00004	97.97	97.97	0	ANNUAL	ALL	5
25/303.93	40/1/24.52	0.00004	98	98	0	ANNUAL	ALL	5
25/31/.22	40/1/19.2	0.00004	98.02	98.02	0	ANNUAL	ALL	5
25/383.69	40/1692.63	0.00004	98.13	98.13	0	ANNUAL	ALL	5
257396.99	4071687.31	0.00004	98.15	98.15	0	ANNUAL	ALL	5
257410.28	4071681.99	0.00004	98.17	98.17	0	ANNUAL	ALL	5
257423.58	4071676.68	0.00004	98.19	98.19	0	ANNUAL	ALL	5
257436.87	4071671.36	0.00004	98.21	98.21	0	ANNUAL	ALL	5
257450.16	4071666.05	0.00004	98.23	98.23	0	ANNUAL	ALL	5
257463.46	4071660.73	0.00004	98.25	98.25	0	ANNUAL	ALL	5
257476.75	4071655.42	0.00004	98.27	98.27	0	ANNUAL	ALL	5
257490.05	4071650.1	0.00004	98.28	98.28	0	ANNUAL	ALL	5
257503.34	4071644.79	0.00004	98.3	98.3	0	ANNUAL	ALL	5
257516.64	4071639.47	0.00004	98.32	98.32	0	ANNUAL	ALL	5
257529.93	4071634.15	0.00004	98.33	98.33	0	ANNUAL	ALL	5
257543.23	4071628.84	0.00004	98.34	98.34	0	ANNUAL	ALL	5
257556.52	4071623.52	0.00004	98.36	98.36	0	ANNUAL	ALL	5
257152.67	4072024.42	0.00007	97.92	97.92	0	ANNUAL	ALL	5
257152.45	4072039.03	0.00007	97.94	97.94	0	ANNUAL	ALL	5
257152.22	4072053.64	0.00007	97.96	97.96	0	ANNUAL	ALL	5
257152	4072068.25	0.00008	97.98	97.98	0	ANNUAL	ALL	5
257151.78	4072082.85	0.00008	98	98	0	ANNUAL	ALL	5
257151.56	4072097.46	0.00008	98.02	98.02	0	ANNUAL	ALL	5
257151.34	4072112.07	0.00008	98.04	98.04	0	ANNUAL	ALL	5
257151.12	4072126.68	0.00008	98.06	98.06	0	ANNUAL	ALL	5
257150.89	4072141.29	0.00008	98.09	98.09	0	ANNUAL	ALL	5
257150.67	4072155.9	0.00008	98.12	98.12	0	ANNUAL	ALL	5
257150.45	4072170.5	0.00008	98.15	98.15	0	ANNUAL	ALL	5
257150.23	4072185.11	0.00008	98.18	98.18	0	ANNUAL	ALL	5
257150.01	4072199.72	0.00008	98.22	98.22	0	ANNUAL	ALL	5
257120.84	4072010.7	0.00006	97.87	97.87	0	ANNUAL	ALL	5
257126.51	4071997.56	0.00006	97.86	97.86	0	ANNUAL	ALL	5
257132.17	4071984.41	0.00006	97.85	97.85	0	ANNUAL	ALL	5
257137.84	4071971.26	0.00006	97.84	97.84	0	ANNUAL	ALL	5
257143.51	4071958.11	0.00006	97.84	97.84	0	ANNUAL	ALL	5
257149.17	4071944.96	0.00006	97.83	97.83	0	ANNUAL	ALL	5
257154.84	4071931.81	0.00006	97.83	97.83	0	ANNUAL	ALL	5
257160.51	4071918.66	0.00006	97.83	97.83	0	ANNUAL	ALL	5

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257166.17	4071905.51	0.00005	97.83	97.83	0	ANNUAL	ALL	5
257171.84	4071892.37	0.00005	97.83	97.83	0	ANNUAL	ALL	5
257177.51	4071879.22	0.00005	97.84	97.84	0	ANNUAL	ALL	5
257183.17	4071866.07	0.00005	97.84	97.84	0	ANNUAL	ALL	5
257188.84	4071852.92	0.00005	97.84	97.84	0	ANNUAL	ALL	5
257194.51	4071839.77	0.00005	97.85	97.85	0	ANNUAL	ALL	5
257205 84	4071813 47	0.00004	97.85	97.85	0		ALL	5
257211 51	/071800 33	0.00004	97.86	97.86	0		AL 1	5
257211.51	4071300.33	0.00004	07.80	07.86	0			5
257217.17	40/1/0/.10	0.00004	97.60	97.80	0	ANNUAL	ALL	5
257222.84	40/1//4.03	0.00004	97.86	97.86	0	ANNUAL	ALL	5
25/228.51	40/1/60.88	0.00004	97.87	97.87	0	ANNUAL	ALL	5
257234.17	4071747.73	0.00004	97.87	97.87	0	ANNUAL	ALL	5
257239.84	4071734.58	0.00004	97.87	97.87	0	ANNUAL	ALL	5
257245.51	4071721.43	0.00003	97.88	97.88	0	ANNUAL	ALL	5
257264.47	4071702.97	0.00003	97.9	97.9	0	ANNUAL	ALL	5
257277.76	4071697.65	0.00003	97.93	97.93	0	ANNUAL	ALL	5
257291.06	4071692.34	0.00003	97.95	97.95	0	ANNUAL	ALL	5
257304.35	4071687.02	0.00003	97.98	97.98	0	ANNUAL	ALL	5
257317.65	4071681.71	0.00003	98	98	0	ANNUAL	ALL	5
257384.12	4071655.13	0.00003	98.1	98.1	0	ANNUAL	ALL	5
257397.41	4071649.81	0.00003	98.13	98.13	0	ANNUAL	ALL	5
257410 71	4071644 5	0.00003	98.15	98.15	0		ALL	5
257424	1071639 18	0.00003	98.16	98.16	0 0			5
257424	4071633.18	0.00003	00.10	00.10	0			5
257457.5	4071055.67	0.00003	96.10	90.10	0	ANNUAL	ALL	5
257450.59	4071628.55	0.00003	98.2	98.2	0	ANNUAL	ALL	5
257463.89	40/1623.23	0.00003	98.22	98.22	0	ANNUAL	ALL	5
25/4//.18	40/161/.92	0.00003	98.24	98.24	0	ANNUAL	ALL	5
257490.47	4071612.6	0.00003	98.25	98.25	0	ANNUAL	ALL	5
257503.77	4071607.29	0.00003	98.27	98.27	0	ANNUAL	ALL	5
257517.06	4071601.97	0.00003	98.28	98.28	0	ANNUAL	ALL	5
257530.36	4071596.66	0.00003	98.3	98.3	0	ANNUAL	ALL	5
257543.65	4071591.34	0.00003	98.31	98.31	0	ANNUAL	ALL	5
257556.95	4071586.02	0.00003	98.32	98.32	0	ANNUAL	ALL	5
257115.17	4072023.85	0.00006	97.89	97.89	0	ANNUAL	ALL	5
257114.95	4072038.46	0.00006	97.91	97.91	0	ANNUAL	ALL	5
257114.73	4072053.07	0.00006	97.93	97.93	0	ANNUAL	ALL	5
257114.51	4072067.68	0.00006	97.95	97.95	0	ANNUAL	ALL	5
257114.29	4072082.29	0.00007	97.97	97.97	0	ANNUAI	ALL	5
257114.06	4072096 89	0.00007	97 99	97 99	0		ALL	5
257113.84	1072111 5	0.00007	98.02	98.02	0 0			5
257113.04	4072111.5	0.00007	98.02 08.0E	98.02 08.0E	0		ALL	5
257113.02	4072120.11	0.00007	98.05	98.05	0		ALL	5
257113.4	4072140.72	0.00007	98.08	98.08	0	ANNUAL	ALL	5
25/113.18	4072155.33	0.00007	98.11	98.11	0	ANNUAL	ALL	5
25/112.96	4072169.94	0.00007	98.14	98.14	0	ANNUAL	ALL	5
257112.73	4072184.54	0.00007	98.18	98.18	0	ANNUAL	ALL	5
257112.51	4072199.15	0.00007	98.21	98.21	0	ANNUAL	ALL	5
257256.61	4072374.05	0.00008	98.28	98.28	0	ANNUAL	ALL	5
257251.29	4072360.69	0.00008	98.27	98.27	0	ANNUAL	ALL	5
257245.97	4072347.32	0.00008	98.26	98.26	0	ANNUAL	ALL	5
257240.66	4072333.95	0.00008	98.26	98.26	0	ANNUAL	ALL	5
257192.82	4072213.66	0.00009	98.26	98.26	0	ANNUAL	ALL	5
257240.37	4072426.95	0.00006	98.29	98.29	0	ANNUAL	ALL	5
257235.06	4072413.58	0.00006	98.28	98.28	0	ANNUAL	ALL	5
257229.74	4072400.22	0.00007	98.28	98.28	0	ANNUAL	ALL	5
257224.43	4072386.85	0.00007	98.27	98.27	0	ANNUAI	ALL	5
257219.11	4072373 48	0.00007	98.26	98.26	ñ		ALL	5
257213 70	4072360 12	0.00007	02 75	98.25	n			5
257215.75	4072300.12 1072216 75	0.00007	00.2J	00.2J	0			5
231200.40	4012340.13	0.00007	50.20	30.23 00 10	0			5 -
257205.10	4072333.39	0.00008	98.20	98.20	U	ANNUAL	ALL	5
25/19/.85	4072320.02	0.00008	98.27	98.27	0	ANNUAL	ALL	5
25/192.53	40/2306.65	0.00008	98.28	98.28	0	ANNUAL	ALL	5
25/187.22	40/2293.29	0.00008	98.29	98.29	0	ANNUAL	ALL	5
257155.32	4072213.09	0.00008	98.25	98.25	0	ANNUAL	ALL	5

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257208.19	4072439.75	0.00006	98.29	98.29	0	ANNUAL	ALL	5
257202.88	4072426.38	0.00006	98.27	98.27	0	ANNUAL	ALL	5
257197.56	4072413.01	0.00006	98.26	98.26	0	ANNUAL	ALL	5
257192.25	4072399.65	0.00006	98.25	98.25	0	ANNUAL	ALL	5
257186.93	4072386.28	0.00006	98.24	98.24	0	ANNUAL	ALL	5
257181.61	4072372.92	0.00006	98.24	98.24	0	ANNUAL	ALL	5
257176 3	4072359 55	0.00006	98.24	98.24	0		ALL	5
257170.98	4072346 18	0.00007	98.25	98.25	0		AL 1	5
257165 67	4072340.10	0.00007	00.25	00.25	0			5
257105.07	4072552.62	0.00007	96.25	96.25	0	ANNUAL	ALL	5
25/160.35	4072319.45	0.00007	98.27	98.27	0	ANNUAL	ALL	5
25/155.04	4072306.08	0.00007	98.28	98.28	0	ANNUAL	ALL	5
257149.72	4072292.72	0.00007	98.3	98.3	0	ANNUAL	ALL	5
257117.83	4072212.52	0.00007	98.24	98.24	0	ANNUAL	ALL	5
257858.99	4072393.35	0.00007	98.68	98.68	0	ANNUAL	ALL	5
257846.49	4072398.41	0.00007	98.63	98.63	0	ANNUAL	ALL	5
257941.22	4072389.96	0.00005	98.99	98.99	0	ANNUAL	ALL	5
257928.03	4072395.3	0.00005	98.92	98.92	0	ANNUAL	ALL	5
257914.84	4072400.63	0.00006	98.83	98.83	0	ANNUAL	ALL	5
257901.66	4072405.96	0.00006	98.75	98.75	0	ANNUAL	ALL	5
257888.47	4072411.29	0.00006	98.7	98.7	0	ANNUAL	ALL	5
257875.28	4072416.63	0.00006	98.67	98.67	0	ANNUAL	ALL	5
257862.09	4072421.96	0.00006	98.64	98.64	0	ANNUAI	ALL	5
2578/18 9	1072121.30	0.00006	98.59	98.59	0 0		AL 1	5
257040.5	4072427.25	0.00000	08 E4	08.55 08.55	0			5
257655.71	4072452.05	0.00000	96.54	96.54	0	ANNUAL	ALL	5
257994.04	4072387.83	0.00004	99.21	99.21	0	ANNUAL	ALL	5
257975.83	4072405.83	0.00004	99.1	99.1	0	ANNUAL	ALL	5
25/962.97	40/2411.03	0.00005	99.04	99.04	0	ANNUAL	ALL	5
257950.12	4072416.23	0.00005	98.98	98.98	0	ANNUAL	ALL	5
257937.26	4072421.43	0.00005	98.91	98.91	0	ANNUAL	ALL	5
257924.4	4072426.63	0.00005	98.83	98.83	0	ANNUAL	ALL	5
257911.54	4072431.83	0.00005	98.76	98.76	0	ANNUAL	ALL	5
257898.68	4072437.03	0.00005	98.7	98.7	0	ANNUAL	ALL	5
257885.82	4072442.23	0.00005	98.69	98.69	0	ANNUAL	ALL	5
257872.96	4072447.43	0.00005	98.66	98.66	0	ANNUAL	ALL	5
257860.11	4072452.63	0.00005	98.63	98.63	0	ANNUAL	ALL	5
257847.25	4072457.82	0.00005	98.6	98.6	0	ANNUAL	ALL	5
257834.39	4072463.02	0.00005	98.56	98.56	0	ANNUAL	ALL	5
258026.48	4072381.96	0.00004	99.32	99.32	0	ANNUAI	ALL	5
258020.92	4072395 3	0.00004	99.27	99.27	0			5
258020.32	4072355.5	0.00004	99.27	99.27	0			5
257006 20	4072408.03	0.00004	00.16	00.16	0			5
257550.55	4072427.38	0.00004	99.10 00.1	99.10	0		ALL	5
257965	4072452.79	0.00004	99.1	99.1	0	ANNUAL	ALL	5
257969.6	4072438.21	0.00004	99.04	99.04	0	ANNUAL	ALL	5
257956.21	4072443.63	0.00004	98.98	98.98	0	ANNUAL	ALL	5
257942.81	4072449.04	0.00004	98.91	98.91	0	ANNUAL	ALL	5
257929.42	4072454.46	0.00004	98.84	98.84	0	ANNUAL	ALL	5
257916.02	4072459.88	0.00004	98.78	98.78	0	ANNUAL	ALL	5
257902.63	4072465.29	0.00004	98.72	98.72	0	ANNUAL	ALL	5
257889.24	4072470.71	0.00005	98.69	98.69	0	ANNUAL	ALL	5
257875.84	4072476.12	0.00005	98.67	98.67	0	ANNUAL	ALL	5
257862.45	4072481.54	0.00005	98.66	98.66	0	ANNUAL	ALL	5
257849.05	4072486.96	0.00005	98.66	98.66	0	ANNUAL	ALL	5
257835.66	4072492.37	0.00005	98.65	98.65	0	ANNUAL	ALL	5
258063.98	4072381.96	0.00004	99.4	99.4	0	ANNUAI	ALL	5
258058 42	4072395 3	0.00004	99 37	99.37	0			5
258052.85	4072408 63	0 00004	99.35	99 35	n		ALL	5
250052.05	1072400.05	0.00004	22.35	00 00	0			5
2500+1.23	4072421.30	0.00003	99.32 00 2	00.02	0			5 F
230041.72	4072455.25	0.00003	55.5 00.24	33.3	0	ANNUAL	ALL	5
258022.76	4072454.04	0.00003	99.24	99.24	U	ANNUAL	ALL	5
258009.36	40/2459.46	0.00003	99.19	99.19	0	ANNUAL	ALL	5
25/995.97	4072464.88	0.00004	99.14	99.14	0	ANNUAL	ALL	5
257982.57	4072470.29	0.00004	99.08	99.08	0	ANNUAL	ALL	5
257969.18	4072475.71	0.00004	99.03	99.03	0	ANNUAL	ALL	5

257055 70	1072101 12	0.00004	00.00	00.00	•			-	
257955.79	4072481.12	0.00004	98.98	98.98	0	ANNUAL	ALL	5	
257942.39	4072486.54	0.00004	98.92	98.92	0	ANNUAL	ALL	5	
257929	4072491.96	0.00004	98.86	98.86	0	ANNUAL	ALL	5	
257915.6	4072497.37	0.00004	98.81	98.81	0	ANNUAL	ALL	5	
257902.21	4072502.79	0.00004	98.76	98.76	0	ANNUAL	ALL	5	
257888.81	4072508.21	0.00004	98.73	98.73	0	ANNUAL	ALL	5	
257875 42	4072513 62	0 00004	98 71	98 71	0	ANNUA	ΔΠ	5	
257073.12	4072510.04	0.00004	08.60	08 60	0		ALL	5	
257802.02	4072519.04	0.00004	98.09	96.09	0	ANNUAL	ALL	5	
257848.63	4072524.45	0.00004	98.68	98.68	0	ANNUAL	ALL	5	
257835.24	4072529.87	0.00004	98.69	98.69	0	ANNUAL	ALL	5	
258101.48	4072381.96	0.00003	99.48	99.48	0	ANNUAL	ALL	5	
258095.92	4072395.3	0.00003	99.45	99.45	0	ANNUAL	ALL	5	
258090.35	4072408.63	0.00003	99.43	99.43	0	ANNUAL	ALL	5	
258084.79	4072421.96	0.00003	99.41	99.41	0	ANNUAL	ALL	5	
258079 22	4072435 29	0.00003	99 39	99 39	0	ΑΝΝΠΑΙ	ΔΠ	5	
258073.65	4072448 63	0.00003	99.38	99.38	0			5	
250075.05	4072440.05	0.00003	00.26	00.26	0			5	
256006.09	4072401.90	0.00003	99.50	99.50	0	ANNUAL	ALL	5	
258049.12	4072480.71	0.00003	99.31	99.31	0	ANNUAL	ALL	5	
258035.73	4072486.13	0.00003	99.27	99.27	0	ANNUAL	ALL	5	
258022.34	4072491.54	0.00003	99.23	99.23	0	ANNUAL	ALL	5	
258008.94	4072496.96	0.00003	99.18	99.18	0	ANNUAL	ALL	5	
257995.55	4072502.37	0.00003	99.14	99.14	0	ANNUAL	ALL	5	
257982.15	4072507.79	0.00003	99.1	99.1	0	ANNUAL	ALL	5	
257968.76	4072513.21	0.00003	99.05	99.05	0	ANNUAL	ALL	5	
257955 36	4072518 62	0.00003	99	99	0	ΔΝΝΠΔΙ	ΔΠ	5	
257935.50	4072524.04	0.00003	98.96	98.96	0			5	
257541.57	4072524.04	0.00003	98.90	98.90	0		ALL	5	
25/928.5/	4072529.45	0.00003	98.91	98.91	0	ANNUAL	ALL	5	
257915.18	4072534.87	0.00003	98.89	98.89	0	ANNUAL	ALL	5	
257901.79	4072540.29	0.00003	98.86	98.86	0	ANNUAL	ALL	5	
257888.39	4072545.7	0.00003	98.84	98.84	0	ANNUAL	ALL	5	
257875	4072551.12	0.00004	98.83	98.83	0	ANNUAL	ALL	5	
257861.6	4072556.54	0.00004	98.83	98.83	0	ANNUAL	ALL	5	
258138.98	4072381.96	0.00003	99.54	99.54	0	ANNUAL	ALL	5	
258133.42	4072395.3	0.00003	99.51	99.51	0	ANNUAL	ALL	5	
258127 85	4072408 63	0.00003	99.5	99.5	0		ALL	5	
258122.00	1072100.05	0.00003	99.9	99.18	0			5	
250122.25	4072421.30	0.00003	00.47	00.47	0			5	
250110.72	4072455.29	0.00003	99.47	99.47	0	ANNUAL	ALL	5	
258111.15	4072448.63	0.00003	99.45	99.45	0	ANNUAL	ALL	5	
258105.59	4072461.96	0.00003	99.44	99.44	0	ANNUAL	ALL	5	
258100.02	4072475.29	0.00003	99.44	99.44	0	ANNUAL	ALL	5	
258094.45	4072488.63	0.00003	99.43	99.43	0	ANNUAL	ALL	5	
258075.49	4072507.37	0.00003	99.39	99.39	0	ANNUAL	ALL	5	
258062.1	4072512.79	0.00003	99.36	99.36	0	ANNUAL	ALL	5	
258048.7	4072518.21	0.00003	99.33	99.33	0	ANNUAL	ALL	5	
258035.31	4072523.62	0.00003	99.29	99.29	0	ANNUAL	ALL	5	
258021 91	4072529 04	0.00003	99.25	99.25	0			5	
258008 52	1072534.46	0.00003	99.20	99.20	0		AL 1	5	
250000.52 257005 12	4072534.40	0.00003	00.19	00.19	0			5	
257995.12	4072539.07	0.00003	99.10	99.10	0	ANNUAL	ALL	5	
25/981.73	4072545.29	0.00003	99.15	99.15	0	ANNUAL	ALL	5	
257968.34	4072550.7	0.00003	99.1	99.1	0	ANNUAL	ALL	5	
257954.94	4072556.12	0.00003	99.06	99.06	0	ANNUAL	ALL	5	
257941.55	4072561.54	0.00003	99.04	99.04	0	ANNUAL	ALL	5	
257928.15	4072566.95	0.00003	99.02	99.02	0	ANNUAL	ALL	5	
257914.76	4072572.37	0.00003	99	99	0	ANNUAL	ALL	5	
257901.36	4072577.78	0.00003	98.99	98.99	0	ANNUAL	ALL	5	
257887.97	4072583.2	0.00003	98.99	98.99	0	ANNUAL	ALL	5	
258211 35	4072179 42	0.00004	99 79	99.79	0	ANNIIAI	ALL	5	
258211 25	407216/ 21	0.00004	00.75 00 77	90.75 90 77	n		ΔII	5	
20211.00	4072104.01	0.00004	<i>33.11</i>	99.77 00 75	0	ANNUAL		5	
250211.35	40/2150.21	0.00004	99.75	39.75	U	ANNUAL	ALL	5	
258211.35	40/2135.6	0.00004	99.72	99.72	0	ANNUAL	ALL	5	
258211.35	40/2120.99	0.00004	99.7	99.7	0	ANNUAL	ALL	5	
258211.35	4072106.38	0.00004	99.68	99.68	0	ANNUAL	ALL	5	
258211.35	4072091.77	0.00004	99.66	99.66	0	ANNUAL	ALL	5	
	258211.35	4072077.17	0.00005	99.65	99.65	0	ANNUAL	ALL	5
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	258211.35	4072062.56	0.00005	99.63	99.63	0	ANNUAL	ALL	5
	258211.35	4072047.95	0.00005	99.62	99.62	0	ANNUAL	ALL	5
	258211.35	4072033.34	0.00005	99.61	99.61	0	ANNUAL	ALL	5
	258176.48	4072381.96	0.00003	99.59	99.59	0	ANNUAL	ALL	5
	258170.92	4072395.3	0.00003	99.57	99.57	0	ANNUAL	ALL	5
	258165.35	4072408.63	0.00003	99.56	99.56	0	ANNUAL	ALL	5
	258159.79	4072421.96	0.00003	99.55	99.55	0	ANNUAL	ALL	5
	258154.22	4072435.29	0.00003	99.54	99.54	0	ANNUAL	ALL	5
	258148.65	4072448.63	0.00002	99.53	99.53	0	ANNUAL	ALL	5
	258143.09	4072461.96	0.00002	99.52	99.52	0	ANNUAL	ALL	5
	258137.52	4072475.29	0.00002	99.52	99.52	0	ANNUAL	ALL	5
	258131.95	4072488.63	0.00002	99.52	99.52	0	ANNUAL	ALL	5
	258126.39	4072501.96	0.00002	99.51	99.51	0	ANNUAL	ALL	5
	258120.82	4072515.29	0.00002	99.5	99.5	0	ANNUAI	ALL	5
	258101.86	4072534.04	0.00002	99.46	99.46	0	ANNUAL	ALL	5
	258088.46	4072539.46	0.00002	99.43	99.43	0	ANNUAI	ALL	5
	258075.07	4072544 87	0.00002	99.41	99.41	0		ALL	5
	258061 68	4072550 29	0.00002	99 38	99 38	0		ALL	5
	258048 28	4072555 7	0.00002	99.35	99 35	0		ALL	5
	258034 89	4072561 12	0.00003	99.33	99.33	0		ALL	5
	258021.05	4072566 54	0.00003	99.28	99.28	0		ALL	5
	258008 1	4072571 95	0.00003	99.25	99.25	0			5
	25799/ 7	4072577.35	0.00003	99.25	99.25	0			5
	257091 21	4072592 70	0.00003	00.10	00.10	0			5
	257967 91	4072588.7	0.00003	99.19	99.19	0			5
	257057.51	4072502.62	0.00003	00.15	00.15	0			5
	257934.32	4072595.02	0.00003	99.13	99.13	0			5
	257541.15	4072599.05	0.00003	99.13 00.12	99.13	0			5
	25/92/./3	4072604.45	0.00003	99.13	99.13	0	ANNUAL	ALL	5
	257914.34	4072009.87	0.00003	99.12	99.12	0	ANNUAL	ALL	5
	257900.94	4072015.28	0.00003	99.13	99.13	0	ANNUAL	ALL	5
	258211.34	4072004.37	0.00006	99.58	99.58	0	ANNUAL	ALL	5
	258211.34	4071989.76	0.00006	99.57	99.57	0	ANNUAL	ALL	5
	258211.34	4071975.15	0.00006	99.57	99.57	0	ANNUAL	ALL	5
	258211.34	4071960.54	0.00006	99.56	99.56	0	ANNUAL	ALL	5
	258211.34	4071945.93	0.00007	99.54	99.54	0	ANNUAL	ALL	5
	258211.34	4071931.32	0.00007	99.53	99.53	0	ANNUAL	ALL	5
	258211.34	4071916.72	0.00007	99.52	99.52	0	ANNUAL	ALL	5
	258211.34	4071902.11	0.00007	99.51	99.51	0	ANNUAL	ALL	5
	258211.34	40/1887.5	0.00007	99.5	99.5	0	ANNUAL	ALL	5
	258211.34	40/18/2.89	0.00007	99.48	99.48	0	ANNUAL	ALL	5
	258211.34	40/1858.28	0.00007	99.47	99.47	0	ANNUAL	ALL	5
	258183.1	4071814.1	0.00008	99.39	99.39	0	ANNUAL	ALL	5
	258188.51	4071827.29	0.00008	99.41	99.41	0	ANNUAL	ALL	5
	258193.93	4071840.47	0.00008	99.43	99.43	0	ANNUAL	ALL	5
**	CONCUNIT ug/	m^3							
**	DEPUNIT g/m^	2							

Home Avenue Warehouse Project Air Quality, Health Risk Analysis, Greenhouse Gas, and Energy Technical Memorandum December 8, 2021

# ATTACHMENT C

# **Energy Consumption Calculations**

# Home Avenue Warehouse Project—Energy Consumption Summary

Date of Last Revision: November 26, 2021

#### Summary of Energy Use During Construction

Construction vehicle fuel Construction equipment fuel Construction office trailer electricity (Annually) 30,078 gallons (gasoline, diesel) 16,658 gallons (diesel) 6,494 kilowatt hours

#### Summary of Energy Use During Proposed Operations

Operational vehicle fuel consumption Passenger vehicle fuel consumption Truck fuel consumption Operational natural gas consumption Operational electricity consumption (Annually) 264,383 gallons (gasoline, diesel) 20,983 gallons (gasoline, diesel) 243,400 gallons (gasoline, diesel) 3,044,700 kilo-British Thermal Units 1,644,226 kilowatt hours

#### Construction Vehicle Fuel Calculations (Page 1 of 2)

California Air Resource Board (CARB). 2021. EMFAC2017 Web Database. Website: https://arb.ca.gov/emfac/2017/. Accessed November 2021.

 EMFAC2017 (v1.0.2) Emissions Inventory
 VMT = Vehicle Miles Traveled

 Region Type: County
 FE = Fuel Economy

 Region: FRESNO
 FE = Fuel Economy

 Calendar Year: 2023
 Season: Annual

 Vehicle Classification: EMFAC2007 Categories
 Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption. Note 'day' in the unit is operation day.

			G	iven					Calcul	ations
								Fuel		
								Consumption		
	Calendar						VMT	(1000	FE	
Region	Year	Vehicle Class	Model Year	Speed	Fuel	Population	(mi/day)	gallons/day)	(mi/gallon)	VMT*FE
FRESNO	2023	HHDT	Aggregated	Aggregated	GAS	3.5782796	472.6746	0.119101015	3.9686863	1875.89707
FRESNO	2023	HHDT	Aggregated	Aggregated	DSL	16286.775	2254835	343.1505226	6.5709803	14816478.5
FRESNO	2023	LDA	Aggregated	Aggregated	GAS	360187.01	13826269	450.5829573	30.6852916	424263110
FRESNO	2023	LDA	Aggregated	Aggregated	DSL	2734.6688	113419.6	2.240176367	50.6297489	5742404.2
FRESNO	2023	LDT1	Aggregated	Aggregated	GAS	39099.954	1354857	52.1252267	25.9923405	35215895
FRESNO	2023	LDT1	Aggregated	Aggregated	DSL	29.873939	419.4733	0.01653543	25.3681542	10641.264
FRESNO	2023	LDT2	Aggregated	Aggregated	GAS	129640.03	4712300	198.0045045	23.7989558	112147830
FRESNO	2023	LDT2	Aggregated	Aggregated	DSL	548.33145	23832.77	0.640468806	37.211438	886851.466
FRESNO	2023	LHDT1	Aggregated	Aggregated	GAS	10624.694	355805.2	42.963626	8.28154456	2946616.48
FRESNO	2023	LHDT1	Aggregated	Aggregated	DSL	10656.827	371708.6	21.02038574	17.6832447	6573014.58
FRESNO	2023	LHDT2	Aggregated	Aggregated	GAS	1825.478	59952.67	8.323817429	7.20254474	431811.769
FRESNO	2023	LHDT2	Aggregated	Aggregated	DSL	3628.5616	128355.2	8.141716014	15.7651287	2023536.27
FRESNO	2023	MDV	Aggregated	Aggregated	GAS	124848.66	4140988	215.1808357	19.244221	79690080.1
FRESNO	2023	MDV	Aggregated	Aggregated	DSL	2105.9419	86518.71	3.196155058	27.0696208	2342028.55
FRESNO	2023	MHDT	Aggregated	Aggregated	GAS	926.14745	51879.66	10.96463468	4.73154504	245470.961
FRESNO	2023	MHDT	Aggregated	Aggregated	DSL	9736.5049	659605.7	71.4206232	9.23550746	6091793.35

Worker Weighted Average Fuel Economy 27.21916

Vendor Weighted Average Fuel Economy 8.53306276

Haul

Weighted Average Fuel Economy 6.5704349

# Construction Vehicle Fuel Calculations (Page 2 of 2) Construction Schedule

Source: CalEEMod Output

Home Avenue Warehouse Project

				Num Days	
CalEEMod Run	Phase Name	Start Date	End Date	Week	Num Days
Project Construction	Site Preparation	1/3/2022	1/14/2022	5	10
Project Construction	Grading	1/15/2022	2/25/2022	5	30
Project Construction	Building Construction	2/26/2022	12/4/2022	5	200
Project Construction	Paving	2/26/2022	3/25/2022	5	20
Project Construction	Architectural Coating	12/5/2022	12/30/2022	5	20

#### Construction Trips and VMT

	Trips p	per Day	Total Trips	Construct	Construction Trip Length in Miles			Trips per Phase			,	/MT per Phas	e	Fuel Co	onsumption (g	allons)
	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Number of Days per	Worker Trip	Vendor Trip	Hauling Trip	Worker	Vendor	Hauling	Worker	Vendor	Hauling
Phase Name	Number	Number	Number	Length	Length	Length	Phase	Number	Number	Number	Trips	Trips	Trips	Trips	Trips	Trips
Site Preparation	18	0	44	10.8	7.3	20	10	180	0	44	1,944	0	880	71.42	0.00	133.93
Grading	20	0	516	10.8	7.3	20	30	600	0	516	6,480	0	10,320	238.07	0.00	1,570.67
Building Construction	188	73	18	10.8	7.3	20	200	37,600	14,600	18	406,080	106,580	360	14,918.90	12,490.24	54.79
Paving	15	4	12	10.8	7.3	20	20	300	80	12	3,240	584	240	119.03	68.44	36.53
Architectural Coating	38	4	2	10.8	7.3	20	20	760	80	2	8,208	584	40	301.55	68.44	6.09

Total Project Construction VMT (miles) 545,540

Total Project Fuel Consumption (gallons) 30,078

#### Construction Equipment Fuel Calculation (Page 1 of 2)

Source: CalEEMod Output Home Avenue Warehouse Project Construction Schedule

Construction Area	Phase Type	Start Date	End Date	Num Days Week	Num Days
Project Construction	Site Preparation	1/3/2022	1/14/2022	5	10
Project Construction	Grading	1/15/2022	2/25/2022	5	30
Project Construction	Building Construction	2/26/2022	12/4/2022	5	200
Project Construction	Paving	2/26/2022	3/25/2022	5	20
Project Construction	Architectural Coating	12/5/2022	12/30/2022	5	20

#### **Construction Equipment**

				Horse	Load	Number of		Fuel (gallons/HP-	Diesel Fuel
Phase Name	Offroad Equipment Type	Amount	Usage Hours	Power	Factor	Days	HP Hours	hour)	Usage
Site Preparation	Rubber Tired Dozers	3	8	247	0.40	10	23,712.00	0.020	485.18
Site Preparation	Tractors/Loaders/Backhoes	4	8	97	0.37	10	11,484.80	0.019	217.54
Grading	Excavators	2	8	158	0.38	30	28,819.20	0.020	569.55
Grading	Graders	1	8	187	0.41	30	18,400.80	0.021	390.07
Grading	Rubber Tired Dozers	1	8	247	0.40	30	23,712.00	0.020	485.18
Grading	Scrapers	2	8	367	0.48	30	84,556.80	0.025	2,102.40
Grading	Tractors/Loaders/Backhoes	2	8	97	0.37	30	17,227.20	0.019	326.31
Building Construction	Cranes	1	7	231	0.29	200	93,786.00	0.015	1,406.35
Building Construction	Forklifts	3	8	89	0.20	200	85,440.00	0.021	1,777.93
Building Construction	Generator Sets	1	8	84	0.74	200	99,456.00	0.042	4,217.22
Building Construction	Tractors/Loaders/Backhoes	3	7	97	0.37	200	150,738.00	0.019	2,855.17
Building Construction	Welders	1	8	46	0.45	200	33,120.00	0.026	857.23
Paving	Pavers	2	8	130	0.42	20	17,472.00	0.022	375.87
Paving	Paving Equipment	2	8	132	0.36	20	15,206.40	0.018	278.73
Paving	Rollers	2	8	80	0.38	20	9,728.00	0.019	188.89
Architectural Coating	Air Compressors	1	6	78	0.48	20	4,492.80	0.028	124.26

Total Construction Equipment Fuel Consumption (gallons)

16,657.89

Notes:

Equipment assumptions are provided in the CalEEMod output files.

Source of usage estimates: California Air Resource Board (CARB). 2021. OFFROAD2017 (v1.0.1) Emissions Inventory

Website: https://www.arb.ca.gov/orion/. Accessed April 17, 2021.

#### Construction Equipment Fuel Calculation (Page 2 of 2)

OFFROAD2017 (v1.0.1) Emissions Inventory Region Type: County Region: Fresno Scenario: All Adopted Rules - Exhaust Vehicle Classification: OFFROAD2017 Equipment Types Units: Emissions: tons/day, Fuel Consumption: gallons/year, Activity: hours/year, HP-Hours: HP-hours/year

						Horsepower	Fuel
					Fuel	Hours (HP-	(gallons/HP-
Region	Vehicle Class	Model Year	HP_Bin	Fuel	(gallons/year)	hours/year)	hour)
Fresno	ConstMin - Cranes	Aggregated	75	Diesel	283.187	18885.015	0.014995321
Fresno	ConstMin - Excavators	Aggregated	175	Diesel	247434.805	12520180.193	0.019762879
Fresno	ConstMin - Graders	Aggregated	175	Diesel	151368.953	7140536.907	0.021198539
Fresno	ConstMin - Pavers	Aggregated	175	Diesel	32732.189	1521509.140	0.021512976
Fresno	ConstMin - Paving Equipment	Aggregated	175	Diesel	13696.518	747231.968	0.018329673
Fresno	ConstMin - Rollers	Aggregated	100	Diesel	79011.010	4069235.397	0.019416672
Fresno	ConstMin - Rough Terrain Forklifts	Aggregated	100	Diesel	200971.731	9657888.419	0.020809076
Fresno	ConstMin - Rubber Tired Dozers	Aggregated	300	Diesel	10331.179	504908.236	0.020461498
Fresno	ConstMin - Scrapers	Aggregated	300	Diesel	90981.977	3659218.054	0.024863776
Fresno	ConstMin - Tractors/Loaders/Backhoes	Aggregated	175	Diesel	211438.622	11162834.316	0.018941303
Fresno	ConstMin - Tractors/Loaders/Backhoes	Aggregated	300	Diesel	127421.155	6692059.770	0.019040648
Fresno	ConstMin - Trenchers	Aggregated	100	Diesel	17961.409	689768.533	0.026039763
Fresno	OFF - ConstMin - Cement and Mortar Mixers	Aggregated	25	Diesel	1766.600	55224.500	0.031989425
Fresno	OFF - ConstMin - Concrete/Industrial Saws	Aggregated	50	Diesel	901.550	21319.650	0.04228728
Fresno	OFF - Light Commercial - Generator Sets	Aggregated	50	Diesel	49348.000	1163787.900	0.042402916
Fresno	OFF - Light Commercial - Welders	Aggregated	50	Diesel	82263.700	3178347.000	0.025882542
Fresno	OFF - Light Commercial - Air Compressors	Aggregated	50	Diesel	17928.800	648240.000	0.027657658

# **Construction Office Electricity Calculation**

Energy Appendix: CalEEMod Typical Construction Trailer Typical Construction Trailer - Fresno County, Annual

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		ΓM	ī/yr	
General Office Building	6364.8	0.5889	1.0000e- 004	1.0000e- 005	0.5947
Total		0.5889	1.0000e- 004	1.0000e- 005	0.5947

kWh/yr = kilowatt hours per year

6,365	kWh/yr
6,295	kWh
1/3/2022	
12/30/2022	
361	
0.99	
	6,365 <b>6,295</b> 1/3/2022 12/30/2022 361 0.99

#### Operational Fuel Calculation—Project-generated Operational Trips (Passenger Vehicles)

California Air Resource Board (CARB). 2021. EMFAC2017 Web Database. Website: https://arb.ca.gov/emfac/2017/. Accessed November 23, 2021.

EMFAC2017 (v1.0.2) Emissions Inventory VMT = Vehicle Miles Traveled Region Type: County FE = Fuel Economy Region: FRESNO Calendar Year: 2023 Season: Annual Vehicle Classification: EMFAC2007 Categories Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption. Note 'day' in the unit is operation day. Given Fuel Region Calendar Year Vehicle Class Model Year Speed Fuel Population VMT Consumption

Aggregated

Aggregated

								Weight	ed Average Fuel Economy	32.58767012
FRESNO	2023	LDT1	Aggregated	Aggregated	DSL	24.83090015	351.9522611	0.013512256	26.04689069	9167.262072
FRESNO	2023	LDT1	Aggregated	Aggregated	GAS	40569.89066	1398435.767	51.00537588	27.41741911	38341499.52
FRESNO	2023	LDT2	Aggregated	Aggregated	DSL	705.945595	29597.10399	0.751922877	39.36188791	1164997.89
FRESNO	2023	LDT2	Aggregated	Aggregated	GAS	133632.97	4763918.967	187.1991367	25.44840244	121234127.1
FRESNO	2023	MDV	Aggregated	Aggregated	DSL	2404.509802	93969.83403	3.300438284	28.47192583	2675502.144
FRESNO	2023	MDV	Aggregated	Aggregated	GAS	121259.0487	3909230.021	192.2808685	20.33083193	79477898.52

3302.660735

381514.1018

133912.4456

14386739.1

2.514683705

444.0992546

DSL

GAS

Calculations

53.25220237 7131132.651

32.39532368 466063069.7

VMT\*FE

FE

#### Operational Fuel Calculation—Project-generated Operational Trips (Passenger Vehicles)

Aggregated

Aggregated

**Total Operational VMT** 

FRESNO

FRESNO

2023

2023

Home Avenue Warehouse Project - Buildout Year Operations (Passenger Vehicles)

LDA

LDA

	Ave	erage Daily Trip I	Rate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	202.00	202.00	202.00	589,741	589,741
Total	202.00	202.00	202.00	589,741	589,741

Annual VMT

(miles)

#### Total VMT 589,741

#### By Vehicle Type (Average Fleet Mix for the 2023 Operational Year for Passenger Vehicles)

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.566440 0.	.058900	0.195420	0.179240	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
								Total Annual				
						Average Fuel	Total Daily Fuel	Fuel				
			Percent of			Economy	Consumption	Consumption				
		Fraction of 1	Vehicle Trips	Annual VMT	Daily VMT	(miles/gallon)	(gallons)	(gallons)				
Passenger Cars (LDA)		0.5664	56.6	334,053	915	32.59	28.1	10,251				
Light Trucks and Mediur	m Vehicles	0.4336	43.4	255,688	701	23.82	29.4	10,732				
Total		_	100.0	589,741	1,616			20,983				

#### Operational Fuel Calculation—Project-generated Operational Trips (Trucks)

California Air Resource Board (CARB). 2021. EMFAC2017 Web Database. Website: https://arb.ca.gov/emfac/2017/. Accessed November 23, 2021.

EMFAC2017 (v1.0 Region Type: Cour Region: ERESNO	EMFAC2017 (v1.0.2) Emissions Inventory     VMT = Vehicle Miles Traveled       Region Type: County     FE = Fuel Economy       Region: FRESNO     FE = Suel Economy									
Calendar Year: 20	23									
Season: Annual										
Vehicle Classificat	ion: EMFAC2007	7 Categories								
Units: miles/day fo	r VMT, trips/day	for Trips, tons/da	ay for Emissions	, 1000 gallons/da	y for Fuel Con	nsumption. Note 'c	ay' in the unit is o	operation day.		
				-						
				Given					Calcul	ations
								Fuel		
Region	Calendar Year	Vehicle Class	Model Year	Speed	Fuel	Population	VMT	Consumption	FE	VMT*FE
FRESNO	2023	LHDT1	Aggregated	Aggregated	DSL	10460.98457	352535.8974	19.51817227	18.06193185	6367479.354
FRESNO	2023	LHDT1	Aggregated	Aggregated	GAS	10173.79335	336229.2535	39.83292259	8.440988801	2838107.363
FRESNO	2023	LHDT2	Aggregated	Aggregated	DSL	3649.071124	124459.2584	7.721566412	16.11839513	2006083.504
FRESNO	2023	LHDT2	Aggregated	Aggregated	GAS	1750.83855	55993.64297	7.645968382	7.323289893	410057.6797
FRESNO	2023	MHDT	Aggregated	Aggregated	DSL	9740.148656	681549.9704	69.24030636	9.843254691	6708669.943
FRESNO	2023	MHDT	Aggregated	Aggregated	GAS	910.5946581	52284.62899	10.73048081	4.872533663	254758.6148
								Weight	ed Average Fuel Economy	11.59360327

								Weighted	Average Fuel Economy	11.59360327
FRESNO	2023	HHDT	Aggregated	Aggregated	DSL	16977.00595	2350104.202	334.3262679	7.029373482	16519760.16
FRESNO	2023	HHDT	Aggregated	Aggregated	GAS	3.506504299	492.7245231	0.119335015	4.128918277	2034.419289
								Weighted	Average Fuel Economy	7.028765498

#### **Operational Fuel Calculation—Project-generated Operational Trips (Trucks)**

Total Operational VMT

Home Avenue Warehouse Project - Buildout Year Operations (Trucks Only)

	Ave	rage Daily Trip I	Rate	Unmitigated	Mitigated
Land Use	Weekday Saturda		Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	94.00	94.00	94.00	1,710,800	1,710,800
Total	94.00	94.00	94.00	1,710,800	1,710,800

#### Annual VMT

(miles)

Total VMT 1,710,800

#### By Vehicle Type (Truck Fleet Mix Only)

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
								Total Annual				
						Average Fuel	Total Daily Fuel	Fuel				
			Percent of			Economy	Consumption	Consumption				
		Fraction of 1	Vehicle Trips	Annual VMT	Daily VMT	(miles/gallon)	(gallons)	(gallons)				
Trucks (HHD)		1.0000	100.0	1,710,800	4,687	7.03	666.8	243,400				
Total Trucks		_	100.0	1,710,800	4,687			243,400				

# **Project Operations Natural Gas Use**

Source: CalEEMod Output Home Avenue Warehouse Project - Buildout Year Operations

kBTU/yr = kilo-British Thermal Units/year

CalEEMod Land Use	Natural Gas Use (kBTU/y				
Park (Landscaping)	0				
Other Non-Asphalt Surfaces	0				
Parking Lot	0				
Unrefrigerated Warehouse-No Rail	3,044,700				
Total	3,044,700	kBTU/yr			

# Project Operations Electricity Use Source: CalEEMod Output

Home Avenue Warehouse Project - Buildout Year Operations

#### kWh/yr = kilowatt hours per year

	Electricity Use				
CalEEMod Land Use	(kWh/yr)				
Park (Landscaping)	0				
Other Non-Asphalt Surfaces	0				
Parking Lot	66,626				
Unrefrigerated Warehouse-No Rail	1,577,600				
Total	1,644,226	kWh/yr			

	Lighting								
EnergyUseLandUseSubType	T24E	NT24E	Elect	T24NG	NT24NG				
City Park	0	0	0	0	0				
Other Non-Asphalt Surfaces	0	0	0	0	0				
Parking Lot	0	0	0.35	0	0				
Unrefrigerated Warehouse-No Rail	0.93	5.13	3.22	16.86	1.05				

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

#### **Typical Construction Trailer**

Fresno County, Annual

#### **1.0 Project Characteristics**

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population	
General Office Building	0.72	1000sqft	0.02	720.00	0	

#### **1.2 Other Project Characteristics**

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			Operational Year	2022
Utility Company	Pacific Gas and Electric Co				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (Ib/MWhr)	0.033	N2O Intensity (Ib/MWhr)	).004

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Home Avenue Warehouse Project - Typical Construction Trailer

Land Use - Upper range of typical single-wide mobile office trailer = 720 square feet.

Construction Phase - Typical construction trailer for energy use estimates - estimates would be included in the operational component of the results.

Off-road Equipment - Zeroed out construction equipment

Architectural Coating -

Vehicle Trips - Run for energy estimation only

Table Name	Column Name	Default Value	New Value		
tblConstructionPhase	NumDays	5.00	1.00		
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00		
tblOffRoadEquipment	UsageHours	6.00	0.00		
tblVehicleTrips	ST_TR	2.21	0.00		

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

tblVehicleTrips	SU_TR	0.70	0.00
tblVehicleTrips	WD_TR	9.74	0.00

## 2.0 Emissions Summary

#### 2.1 Overall Construction

#### **Unmitigated Construction**

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr							MT/yr								
2022	5.0100e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	5.0100e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

#### **Mitigated Construction**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr					MT/yr					
2022	5.0100e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	5.0100e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

#### 5.0 Energy Detail

Historical Energy Use: N

#### 5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr							МТ	/yr							
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.5889	0.5889	1.0000e- 004	1.0000e- 005	0.5947
Electricity Unmitigated	6) 8) 8) 8) 8)					0.0000	0.0000		0.0000	0.0000	0.0000	0.5889	0.5889	1.0000e- 004	1.0000e- 005	0.5947
NaturalGas Mitigated	5.0000e- 005	4.6000e- 004	3.8000e- 004	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005	0.0000	0.4964	0.4964	1.0000e- 005	1.0000e- 005	0.4994
NaturalGas Unmitigated	5.0000e- 005	4.6000e- 004	3.8000e- 004	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005	0.0000	0.4964	0.4964	1.0000e- 005	1.0000e- 005	0.4994

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

## 5.3 Energy by Land Use - Electricity

#### <u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
General Office Building	6364.8	0.5889	1.0000e- 004	1.0000e- 005	0.5947
Total		0.5889	1.0000e- 004	1.0000e- 005	0.5947

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e	
Land Use	kWh/yr	MT/yr				
General Office Building	6364.8	0.5889	1.0000e- 004	1.0000e- 005	0.5947	
Total		0.5889	1.0000e- 004	1.0000e- 005	0.5947	

# 6.0 Area Detail

6.1 Mitigation Measures Area

<u>C</u> aliforn <u>H</u> istori <u>R</u> esou <u>I</u> nfo <u>S</u> y	ia ical arces ormation stem	Fresno Kern Kings Madera Tulare	Southern San Joaquin Valley Information Center California State University, Bakersfield Mail Stop: 72 DOB 9001 Stockdale Highway Bakersfield, California 93311-1022 (661) 654-2289 E-mail: ssjvic@csub.edu Website: www.csub.edu/ssjvic			
То:	Emily Bowen Crawford & Bowen Planning, Inc. 113 N. Church St. #302 Visalia, CA 93291		Record Search 21-441			
Date:	November 12, 2021					
Re:	City of Fresno Home Ave Industrial Development Project					
County:	Fresno					
Map(s):	Clovis 7.5'					

#### CULTURAL RESOURCES RECORDS SEARCH

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

The following are the results of a search of the cultural resource files at the Southern San Joaquin Valley Information Center. These files include known and recorded cultural resources sites, inventory and excavation reports filed with this office, and resources listed on the National Register of Historic Places, the OHP Built Environment Resources Directory, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest. Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the OHP are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area.

#### PRIOR CULTURAL RESOURCE STUDIES CONDUCTED WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there has been no cultural resource studies in the Project Area, and four cultural resource studies fall in the one-half mile radius, FR-01840, 01908, 02081, & 02399.

#### KNOWN/RECORDED CULTURAL RESOURCES WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

There are no recorded resources within the project area, and 12 recorded resources fall within the one-half mile radius, P-10-005049, 005050, 005051, 005052, 005053, 005054, 005055, 005056, 005057, 005058, 005059, 005060. These resources consist of historic properties.

There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, or the California State Historic Landmarks.

#### COMMENTS AND RECOMMENDATIONS

We understand this project is the proposed Home Warehouse and parking lot development, which includes the construction of a concrete tilt-up shell warehouse building. Further, we understand this project area is currently vacant. Because none of this project area has been previously studied for cultural resources, it is unknown if any are present. As such, prior to ground disturbance activities, we recommend a qualified, professional consultant conduct a field survey to determine if cultural resources are present. A list of qualified consultants can be found at www.chrisinfo.org.

We also recommend that you contact the Native American Heritage Commission in Sacramento. They will provide you with a current list of Native American individuals/organizations that can assist you with information regarding cultural resources that may not be included in the CHRIS Inventory and that may be of concern to the Native groups in the area. The Commission can consult their "Sacred Lands Inventory" file to determine what sacred resources, if any, exist within this project area and the way in which these resources might be managed. Finally, please consult with the lead agency on this project to determine if any other cultural resource investigation is required. If you need any additional information or have any questions or concerns, please contact our office at (661) 654-2289.

By:

Jeremy E David, Assistant Coordinator

Date: November 12, 2021

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.



December 7, 2021

Ms. Emily Bowen Principal Environmental Planner CRAWFORD & BOWEN PLANNING, INC. 113 N Church Street, Suite 302 Visalia, California 93291

# RE: REVIEW OF FRESNO YOSEMITE AIRPORT LAND USE COMPATIBILITY NOISE GUIDELINES, PROPOSED WAREHOUSE AT 5255 E. HOME AVENUE, FRESNO

Dear Ms. Bowen:

As requested, WJV Acoustics, Inc. (WJVA) is providing this letter summarizing WJVA's review of the Fresno Yosemite International Airport noise compatibility standards, as they may apply to the subject project site and proposed land use. Below is a summary of noise compatibility standards applicable to the proposed project. The project site is provided as Figure 1.

Appendix A provides definitions of the acoustical terminology used in this letter of findings. Unless otherwise stated, all sound levels reported in this analysis are A-weighted sound pressure levels in decibels (dB). A-weighting de-emphasizes the very low and very high frequencies of sound in a manner similar to the human ear. Most community noise standards utilize A-weighted sound levels, as they correlate well with public reaction to noise. Appendix B provides typical A-weighted sound levels for common noise sources.

#### FRESNO COUNTY AIRPORT LAND USE COMPATIBILITY PLAN -

The Fresno County Airport Land Use Compatibility Plan (ALUCP, adopted December 2018) provides guidelines and guidance in respect to compatible land uses near Fresno County airports. The ALUCP states that the guidelines provided are intended to *"protect public health, safety, and welfare by encouraging orderly expansion of airports and the adoption of land use measures that minimizes exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses."* 

Ms. Emily Bowen Principal Environmental Planner CRAWFORD & BOWEN PLANNING, INC. December 7, 2021 Page 2

Table 3B (Noise Compatibility Criteria Matrix) in the Fresno County Airport Land Use Compatibility Plan provides compatibility guidelines for specific land use designations located within specific airport noise exposure contours. Land uses within each noise contour are determined to be either Y (Yes, Land use and related structures compatible without restrictions), C (Conditionally acceptable, Land use and related structures are permitted, provided that sound insulation is provided to reduce interior noise levels from exterior sources to CNEL 45 dB or lower) or N (No, Land use and related structures are not compatible).

The proposed project would be operated as a warehouse facility and associated parking lot. The project site is located within the airport 60-65 dB CNEL noise exposure contour. Figure 2 provides the project site location in respect to the airport future noise contours. Table 3B is provided as Appendix C, with the relevant project compatibility guidelines highlighted.

Reference to the project site location as well as the noise compatibility matrix (Table 3B), it can be determined that the proposed project land use designations (warehouse, parking) are considered to be compatible without any restrictions. The compatibility determination applies to all noise contours at the airport. Therefore, it has been determined that the proposed project is wholly compatible with guidelines and land use criteria established in the Fresno Yosemite International Airport Land Use Compatibility Plan. Mitigation measures are not required for project compliance.

Please contact me at 559-627-4923 or <u>walter@wjvacoustics.com</u> if there are questions or additional information is required.

Sincerely,

WJV ACOUSTICS, INC.

Walter J. Van Groningen President

## APPENDIX A

#### ACOUSTICAL TERMINOLOGY

AMBIENT NOISE LEVEL:	The composite of noise from all sources near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.
CNEL:	Community Noise Equivalent Level. The average equivalent sound level during a 24-hour day, obtained after addition of approximately five decibels to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and ten decibels to sound levels in the night before 7:00 a.m. and after 10:00 p.m.
DECIBEL, dB:	A unit for describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals (20 micronewtons per square meter).
DNL/L <sub>dn</sub> :	Day/Night Average Sound Level. The average equivalent sound level during a 24-hour day, obtained after addition of ten decibels to sound levels in the night after 10:00 p.m. and before 7:00 a.m.
L <sub>eq</sub> :	Equivalent Sound Level. The sound level containing the same total energy as a time varying signal over a given sample period. $L_{eq}$ is typically computed over 1, 8 and 24-hour sample periods.
NOTE:	The CNEL and DNL represent daily levels of noise exposure averaged on an annual basis, while $L_{eq}$ represents the average noise exposure for a shorter time period, typically one hour.
L <sub>max</sub> :	The maximum noise level recorded during a noise event.
L <sub>n</sub> :	The sound level exceeded "n" percent of the time during a sample interval ( $L_{90}$ , $L_{50}$ , $L_{10}$ , etc.). For example, $L_{10}$ equals the level exceeded 10 percent of the time.

## A-2

## ACOUSTICAL TERMINOLOGY

NOISE EXPOSURE	
CONTOURS:	Lines drawn about a noise source indicating constant levels of noise exposure. CNEL and DNL contours are frequently utilized to describe community exposure to noise.
NOISE LEVEL	
REDUCTION (NLR):	The noise reduction between indoor and outdoor environments or between two rooms that is the numerical difference, in decibels, of the average sound pressure levels in those areas or rooms. A measurement of "noise level reduction" combines the effect of the transmission loss performance of the structure plus the effect of acoustic absorption present in the receiving room.
SEL or SENEL:	Sound Exposure Level or Single Event Noise Exposure Level. The level of noise accumulated during a single noise event, such as an aircraft overflight, with reference to a duration of one second. More specifically, it is the time-integrated A-weighted squared sound pressure for a stated time interval or event, based on a reference pressure of 20 micropascals and a reference duration of one second.
SOUND LEVEL:	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the response of the human ear and gives good correlation with subjective reactions to noise.
SOUND TRANSMISSION	
CLASS (STC):	The single-number rating of sound transmission loss for a construction element (window, door, etc.) over a frequency range where speech intelligibility largely occurs.

# APPENDIX B EXAMPLES OF SOUND LEVELS



# **APPENDIX C**

# FRESNO YOSEMITE AIRPORT LAND USE COMPATIBILITY MATRIX



criteria shown in **Table 3B**. The criteria indicate the maximum acceptable airport noise levels, described in terms of CNEL, for the indicated land uses. The compatibility criteria indicate whether a proposed land use is "compatible," "conditionally compatible," or "not compatible" within each contour zone, designated by the identified CNEL ranges.

- "Compatible" means that the proposed land use is compatible with the CNEL level indicated in the table and may be permitted without any special requirements related to the attenuation of aircraft noise.
- "Conditionally compatible" means that the proposed land use is compatible if the conditions described in **Table 3B** are met.
- "Not compatible" means that the proposed land use is incompatible with aircraft noise at the indicated CNEL level.

	CNEL			
	60-64	65-69	70-74	75+
RESIDENTIAL		• •	• •	• •
Single units – detached	C (1, 2)	Ν	Ν	Ν
Singe units – semi-detached	C (1, 2)	Ν	Ν	Ν
Single units – attached row	C (1, 2)	N	Ν	Ν
Two units	C (1, 2)	Ν	Ν	Ν
Multi-family, three or more units (rental and ownership)	C (1, 2)	Ν	Ν	Ν
Group quarters (including retirement homes; assisted living; nursing homes, col-	C (1, 2)			
lege dormitories, military barracks, correctional residential facilities, extended stay				
hotels*)		Ν	N	Ν
Mobile home park or courts	C (1, 2)	Ν	Ν	Ν
PUBLIC/INSTITUTIONAL FACILITIES				
Education facilities (including daycare centers (> 14 children), children schools (K-	C (1, 2)			
12 grade), adult schools, colleges, universities)		Ν	N	Ν
Religious facilities, libraries, museums, galleries, clubs, lodges	C (1, 2)	Ν	Ν	Ν
Hospitals, nursing homes, and other health care services	Y	Ν	Ν	Ν
Governmental services (administrative, police, fire stations**)	Y	Ν	Ν	Ν
Outdoor music shells, amphitheaters	Υ	Ν	Ν	Ν
Cemeteries, cemetery chapels; mortuaries	Υ	Y	Y	Ν
RECREATIONAL				
Outdoor sport events, stadiums, playgrounds, campgrounds, and recreational ve-	Y			
hicle parks		N	Ν	Ν
Nature exhibits, wildlife reserves, and zoos	Y	Ν	Ν	Ν
Indoor recreation, amusements, athletic clubs, gyms and spectator events, movie	Y			
theaters, parks, outdoor recreation: tennis, golf courses, riding trails, etc.		C(1)	Ν	Ν
COMMERCIAL		-	-	
Wholesale Trade	Y	Y	C(1)	Ν
Retail trade (eating and drinking establishments, personal services, and dance stu-				
dios)	Y	Y	C(1)	Ν
Finance, insurance, and real estate services	Y	Y	C(1)	Ν
Business services	Υ	Y	C(1)	Ν
Repair services	Y	Y	C(1)	Ν
Professional services	Y	Y	C(1)	Ν
Hotels, motels, transient lodgings, and bed and breakfasts	Y	C(1)	Ν	Ν

#### TABLE 3B Noise Compatibility Criteria Matrix Fresno County Airport Land Use Compatibility Plan



#### TABLE 3B (Continued) Noise Compatibility Criteria Matrix Fresno County Airport Land Use Compatibility Plan

	CNEL			
	60-64	65-69	70-74	75+
INDUSTRIAL				
Manufacturing	Y	Y	Y	Y
Printing, publishing, and allied industries	Y	Y	Y	Y
Chemicals and allied products manufacturing	Y	Y	Y	Y
Miscellaneous manufacturing	Y	Y	Y	Y
Highway and street right-of-way and other transportation, communication, and				
utilities	Y	Y	Y	Y
Automobile parking car dealerships, car washes, indoor/outdoor storage facilities,				
gas stations, truck stops, and transportation terminals	Y	Y	Y	Y
Processing of food, wood and paper products; printing and publishing; ware-				
houses, wholesale and storage activities	Y	Y	Y	Y
Refining, manufacturing and storage of chemicals, petroleum and related prod-				
ucts, manufacturing and assembly of electronic components, etc.	Y	Y	Y	Y
Salvage yards, solid waste facilities, natural resource extraction and processing,				
agricultural, mills and gins	Υ	Y	Υ	Y
AGRICULTURE				
Agriculture (except livestock)	C (1, 2)	C(1, 2)	C(3)	Ν
Livestock farming and animal breeding, animal shelters, and kennels	C (1, 2)	C(1, 2)	C(3)	Ν
Agricultural-related activities	Y	C(1, 2)	C(3)	Ν
Forestry activities and related services	Y	C(1, 2)	C(3)	Ν
Fishing activities and related services	Y	C(1, 2)	C(3)	Ν

Table Notes:

CNEL – Community Noise Equivalent Level, in A-weighted decibels.

Y (Yes) – Land use and related structures compatible without restrictions.

C (Conditionally compatible) - Land use and related structures are permitted, provided that sound insulation is provided to reduce interior noise levels from exterior sources to CNEL 45 dB or lower.

N (No) - Land use and related structures are not compatible.

(1) Requires an avigation easement be granted to the airport operator (See Appendix L for avigation easement sample).

(2) Residential buildings must be sound-insulated to achieve an indoor noise level of CNEL 45 dB or less from exterior sources (See Policy 3.2.5).

(3) Accessory dwelling units are not compatible.

Note:

Land uses not specifically listed shall be evaluated, as determined by the ALUC, using the criteria for similar uses.

\* Lodging intended for stays by an individual person of no more than 25 days consecutively and no more than 90 days total per year; facilities for longer stays are in the extended-stay hotel category

\*\* Airport Rescue and Fire Fighting (ARFF) facilities are exempt from this requirement due to Federal Aviation Administration regulations.

#### 3.3.3 Residential Uses

Residential uses are not considered compatible above 65 CNEL. This is consistent with the Handbook and the California Code of Regulations.

#### FIGURE 1: PROJECT SITE PLAN





#### FIGURE 2: PROJECT SITE LOCATION AND FRESNO YOSEMITE AIRPORT NOISE EXPOSURE CONTOURS



# ТЧАЯО

#### МЕМОЯАИDUM

- **TO:** Emily Bowen, Crawford & Bowen Planning, Inc.
- FROM: Erik Ruehr, VRPA Technologies, Inc.
- DATE: March 4, 2022
- RE: Home Avenue Industrial Warehouse Vehicle Miles Traveled (TMV) balavis

This memorandum provides a vehicle miles traveled (VMT) analysis for the Home Avenue Industrial Warehouse project located on the north side of Home Avenue east of Peach Avenue in the City of Fresno. A VMT analysis is required for environmental documents processed in California as of July 1, 2020 when SB 743 was implemented statewide. The remainder of this memorandum provides sections describing background information, VMT analysis, and VMT mitigation.

#### 

The project location as shown in Exhibit 1. A site plan is shown in Exhibit 2. Plans call for the development of a 162,650 sq. ft. warehouse.

#### **SISYJANA TMV**

The VMT analysis was conducted using the City of Fresno's CEQA Guidelines for Vehicle Miles Travelled Thresholds (City of Fresno 2020). Pages 9 through 19 of the guidelines describe various conditions under which a project's VMT impacts may be presumed to be insignificant. The following two conditions are relevant to the proposed project:

- Residential and office projects that are located in areas with low VMT, and that incorporate similar features (i.e., density, mix of uses, transit accessibility), will tend to exhibit similarly low VMT.
- Based on the City's traffic study guidelines or existing CEQA guidelines, other conditions may apply to screen out projects.

Emily Bowen March 4, 2022 Page **2** of **3** 

Although the proposed project is not an office project, its characteristics with respect to VMT are almost identical to those of an office project. According to CEQA guidance provided by the Governor's Office of Planning and Research (OPR), heavy duty truck trips are not included in the definition of VMT associated with a project. The Technical Advisory on Evaluating Transportation Impacts in CEQA (OPR 2018) includes the following statement: "Section 15064.3, subdivision (a), states, 'For the purposes of this section, 'vehicle miles traveled' refers to the amount and distance of automobile travel attributable to a project.' Here, the term "automobile" refers to on-road passenger vehicles, specifically cars and light trucks." Due to the exclusion of heavy-duty truck trips, the VMT characteristics of an office and a warehouse are nearly identical in that the primary component of VMT would be employee commute trips and secondary components of VMT would be employee non-commute trips and visitor trips.

Based on the conclusion that the project can be treated as an office project for the purposes of VMT analysis, the first bullet above is applicable and analysis was conducted to determine whether the project is located in a low VMT area. Figure 7 of the City of Fresno's CEQA Guidelines for Vehicle Miles Travelled Thresholds includes a map showing where low VMT areas are located in the City of Fresno based on VMT per employee characteristics. The project's location on the north side of Home Avenue east of Peach Avenue is in a low VMT area. A copy of Figure 7 is included as an attachment to this memorandum.

Due to the project's location in a low VMT area of the City of Fresno, it meets the conditions for being screened out of requiring further VMT analysis and it can be presumed to have a less than significant VMT impact.

#### VMT MITIGATION

Since the project has a less than significant VMT impact, no mitigation measures are needed.

Please contact me if you have any questions. I can be reached by email at <u>eruehr@vrpatechnologies.com</u> or by phone at 858/361-7151.





# Home Avenue Industrial Warehouse Proiect Site Plan





Emily Bowen March 4, 2022 Page **3** of **3** 

#### ATTACHMENT

CITY OF FRESNO CEQA GUIDELINES FOR VEHICLE MILES TRAVELED THRESHOLDS FIGURE 7
