

Appendix A
Air Quality Assessment and Greenhouse Gas Memorandum

MEMORANDUM

To: Ruben Salas, Kimley-Horn and Associates

From: Elena Ajdari, Kimley-Horn and Associates

Date: October 11, 2022

Subject: Fontana Plant F20 Reservoirs – Fontana, San Bernardino County, CA – Air Quality and Greenhouse Gas Emissions

Purpose

The purpose of this memorandum is to identify the air quality and greenhouse gas (GHG) emissions associated with construction and operation of the proposed Fontana Plant F20 Reservoirs Project (project), located in the City of Fontana, San Bernardino County, California.

Project Location

The project is generally located at the terminus of Long View Drive in the City of Fontana, San Bernardino County, California. The project site consists of an existing 0.8-acre site (Assessor's Parcel Number [APN]: 0237-411-17) and 1.0-acre site, which includes a portion of the adjacent parcel (APN 0237-411-15). The project is situated on vacant land and located approximately 1.8 miles south of Interstate 10 (I-10), 1.5 miles north of State Route 60 (SR-60), and 4.5 miles east of Interstate 15 (I-15). The project site is surrounded by vacant land, with residential communities concentrated further to the north, east, and west.

Project Description

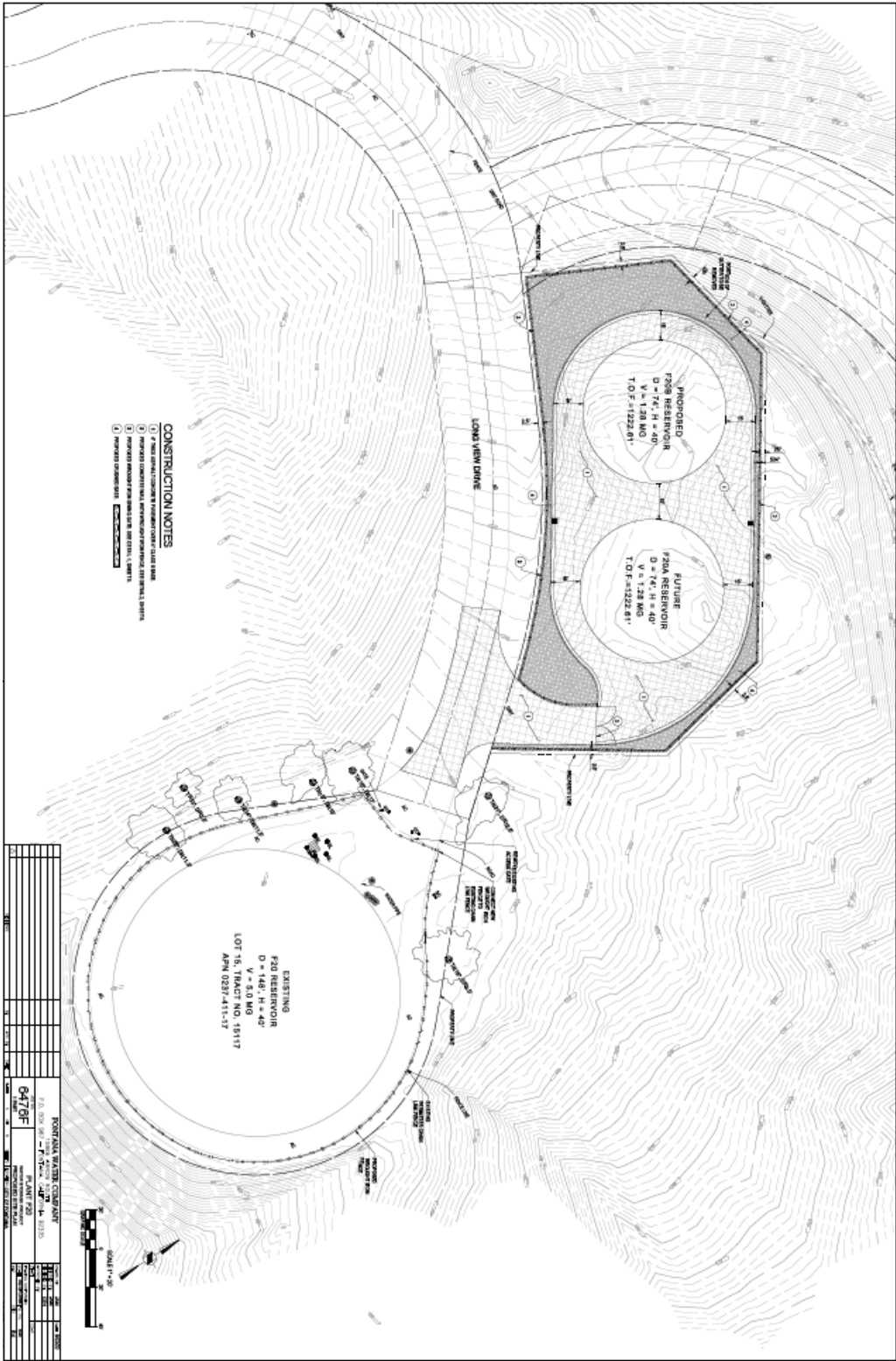
The project consists of the installation and operation of two new 1.28-million-gallon (MG) reservoir tanks [Plant F20 Reservoirs (East) and (West)] to be used for potable water services within Fontana Water Company's (FWC) service area. As shown in [Exhibit 1: Site Plan](#), the proposed reservoir Plant F20 Reservoir (East) and Plant F20 Reservoir (West) would be located just northwest of the existing 5.0 MG Plant F20 Reservoir (South). The Plant F20 Reservoir (East) and Plant F20 Reservoir (West) would be constructed of welded steel, measuring 74 feet in diameter and 40 feet in height.

The proposed project includes the maintenance required by FWC at the existing Plant F20 Reservoir (South). This will be made possible after the construction and successful operation of the Plant F20 Reservoir (East) and Plant F20 Reservoir (West). The maintenance work includes the interior recoating and exterior patchwork and paint of the Plant F20 Reservoir (South). The maintenance work for the Plant F20 Reservoir (South) is necessary as the existing coating system has exceeded its 20- to 25-year life expectancy. Regional access is provided via I-10 at the Cherry and Citrus Avenue Ramps. Local

access is provided via Longview Drive. The project would allow for the FWC to meet the necessary water storage requirements for the community to meet existing water demands for domestic uses, fire suppression, and emergency needs.

Construction is anticipated to begin in 2024 and last for approximately one and half years. Development of the site will require grading for the reservoir foundations, related piping, pavement, light pole foundations, gravel paved surface, wrought iron fencing, and a concrete perimeter retaining wall. No construction activities would be associated with the maintenance of the existing Plant F20 Reservoir (South).

Exhibit 1: Site Plan



Regulatory Setting

Air Quality

South Coast Air Quality Management District Regulations

The South Coast Air Quality Management District (SCAQMD) is the air pollution control agency for Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino Counties. The agency's primary responsibility is ensuring that California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS) are attained and maintained in the South Coast Air Basin (SCAB). The SCAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, conducting public education campaigns, and many other activities. All projects are subject to SCAQMD rules and regulations in effect at the time of construction.

The SCAQMD California Environmental Quality Act (CEQA) Air Quality Handbook provides significance thresholds for volatile organic compounds (VOC) (also referred to as reactive organic gases [ROG]), nitrogen oxides (NO_x), carbon monoxide (CO), sulfur oxides (SO_x), particulate matter 10 microns or less in diameter (PM₁₀), and particulate matter 2.5 microns or less in diameter (PM_{2.5}). The thresholds apply to both project construction and operation within the SCAQMD jurisdictional boundaries. If the SCAQMD thresholds are exceeded, a potentially significant impact could result. However, ultimately the lead agency determines the thresholds of significance for impacts. If a project proposes development in excess of the established thresholds, as outlined in Table 1: South Coast Air Quality Management District Significance Thresholds, a significant air quality impact may occur, and additional analysis is warranted to fully assess the significance of impacts.

Table 1: South Coast Air Quality Management District Significance Thresholds		
Pollutant	Mass Daily Thresholds (pounds per day)	
	Construction	Operations
Nitrogen Oxides (NO _x)	100	55
Volatile Organic Compounds (VOC) ¹	75	55
Particulate Matter up to 10 Microns (PM ₁₀)	150	150
Particulate Matter up to 2.5 Microns (PM _{2.5})	55	55
Sulphur Oxides (SO _x)	150	150
Carbon Monoxide (CO)	550	550
1. VOCs and reactive organic gases (ROGs) are subsets of organic gases that are emitted from the incomplete combustion of hydrocarbons or other carbon-based fuels. Although they represent slightly different subsets of organic gases, they are used interchangeably for the purposes of this analysis.		
Source: South Coast Air Quality Management District, <i>South Coast AQMD Air Quality Significance Thresholds</i> , April 2019.		

The following is a list of SCAQMD rules that would be required for project construction activities:

- **Rule 401 (Visible Emissions)** – This rule states that a person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart or of such opacity as to obscure an observer's view.
- **Rule 402 (Nuisance)** – This rule prohibits the discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. This rule does not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.
- **Rule 403 (Fugitive Dust)** – This rule requires fugitive dust sources to implement best available control measures for all sources, and all forms of visible particulate matter are prohibited from crossing any property line. This rule is intended to reduce PM₁₀ emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. PM₁₀ suppression techniques are summarized below.
 - a) Portions of a construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized.
 - b) All on-site roads will be paved as soon as feasible or watered periodically or chemically stabilized.
 - c) All material transported off-site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.
 - d) The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.
 - e) Where vehicles leave a construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the workday to remove soil tracked onto the paved surface.
- **Rule 1113 (Architectural Coatings)** – This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce ROG emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories.

Greenhouse Gas Emissions

California Governor Arnold Schwarzenegger issued Executive Order S-3-05 which was issued in June 2005, which established the following GHG emission reduction targets: by 2010: reduce GHG emissions to 2000 levels; by 2020: reduce GHG emissions to 1990 levels; and by 2050: reduce GHG emissions to 80 percent below 1990 levels.

Assembly Bill (AB) 32 Statutes of 2006, Health and Safety Code section 38500 et seq. requires that CARB determine what the Statewide GHG emissions level was in 1990 and approve a Statewide GHG emissions limit that is equivalent to that level, to be achieved by 2020. CARB has approved a 2020 emissions limit of 427 million metric tons of CO₂ equivalent (MTCO₂e). Additionally, issued in April 2015, Executive Order B-30-15 requires Statewide GHG emissions to be reduced 40 percent below 1990 levels by 2030.

Executive Order B-30-15, which was issued in April 2015, requires statewide GHG emissions to be reduced 40 percent below 1990 levels by 2030. Senate Bill 32 (SB 32), signed into law in September 2016, codifies the 2030 GHG reduction target in Executive Order B-30-15. The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030 and to adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions. With SB 32, the Legislature passed companion legislation AB 197, which provided additional direction for developing an updated Scoping Plan. CARB released the second update to the Scoping Plan to reflect the 2030 target set by Executive Order B-30-15 and codified by SB 32 in November 2017.

Due to the nature of global climate change, it is not anticipated that any single development project would have a substantial effect on global climate change. GHG emissions from the proposed project would combine with emissions emitted across California, the United States, and the world to cumulatively contribute to global climate change.

Addressing GHG emissions generation impacts requires an agency to make a determination as to what constitutes a significant impact. The amendments to the CEQA Guidelines specifically allow lead agencies to determine thresholds of significance that illustrate the extent of an impact and are a basis from which to apply mitigation measures. This means that each agency is left to determine whether a project's GHG emissions would have a "significant" impact on the environment. The guidelines direct that agencies are to use "careful judgment" and "make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" the project's GHG emissions (14 California Code of Regulations Section 15064.4(a)).

On September 28, 2010, the SCAQMD GHG CEQA Significance Threshold Stakeholder Working Group staff recommended an interim screening level numeric bright-line threshold of 10,000 MTCO₂e per year for industrial projects. For all non-industrial projects, the SCAQMD is proposing a screening threshold of 3,000 MTCO₂e per year. SCAQMD concluded that projects with emissions less than the screening threshold would not result in a significant cumulative impact.

The working group was formed to assist the SCAQMD's efforts to develop a GHG significance threshold and is composed of a wide variety of stakeholders including the State Office of Planning and Research (OPR), CARB, the Attorney General's Office, a variety of city and county planning departments in the South Coast Air Basin, various utilities such as sanitation and power companies throughout the basin, industry groups, and environmental and professional organizations. The proposed thresholds were developed to be consistent with CEQA requirements for developing significance thresholds, are supported by substantial evidence, and provide guidance to CEQA practitioners and lead agencies with regard to determining whether GHG emissions from a proposed project are significant.

Air Quality Analysis

Construction Emissions

Construction associated with the proposed project would generate short-term emissions of criteria air pollutants. The criteria pollutants of primary concern within the project area include ozone-precursor pollutants (i.e., ROG and NO_x), PM₁₀, and PM_{2.5}. Construction-generated emissions are short term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the SCAQMD's thresholds of significance.

Construction results in the temporary generation of emissions resulting from site preparation, grading, road paving, motor vehicle exhaust associated with construction equipment and worker trips, and the movement of construction equipment, especially on unpaved surfaces. Emissions of airborne particulate matter are largely dependent on the amount of ground disturbance associated with site preparation activities as well as weather conditions and the appropriate application of water.

Project construction activities are anticipated to begin in the first half of 2024 with a duration of approximately 17 months. Construction-generated emissions associated with the proposed project were calculated using the California Air Resources Board (CARB)-approved California Emissions Estimator Model version 2020.4.0 (CalEEMod), which is designed to model emissions for land use development projects, based on typical construction requirements. See [Appendix A: Air Quality and GHG Data](#) for more information regarding the construction assumptions used in this analysis. Predicted maximum daily construction-generated emissions for the proposed project are identified in [Table 2: Project Construction Emissions](#).

Table 2: Project Construction Emissions						
Construction Year	Emissions (pounds per day) ¹					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
2024	1.00	12.62	10.95	0.03	2.90	1.48
2025	0.94	7.82	10.84	0.02	0.56	0.36
SCAQMD Threshold	75	100	550	150	150	55
SCAQMD Threshold Exceeded?	No	No	No	No	No	No
ROG = Reactive Organic Gases; NO _x = Nitrogen Oxides; CO = Carbon Monoxide; SO ₂ = Sulfur Dioxide; PM ₁₀ = Particulate Matter 10 microns in diameter or less; PM _{2.5} = Particulate Matter 2.5 microns in diameter or less						
1. SCAQMD Rule 403 Fugitive Dust applied. The Rule 403 reduction/credits include the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. No mitigation was applied to construction equipment. Refer to Appendix A for Model Data Outputs.						
Source: CalEEMod version 2020.4.0. Refer to Appendix A for model outputs.						

Table 2 shows that construction pollutant emissions would remain below their respective thresholds with implementation of SCAQMD Rule 403 (required for all projects). The project would also be required to comply with SCAQMD Rules 402 and 1113, which prohibit nuisances and limit VOC content in paints, respectively. Compliance with SCAQMD rules 402 and 1113 would further reduce specific construction-related emissions. As shown above, all criteria pollutant emissions would be below their respective thresholds and impacts would be less than significant.

Operational Emissions

Operational emissions are typically associated with vehicle trips (motor vehicles), energy sources (natural gas use), and area sources (consumer products, architectural coatings, and landscape maintenance equipment). The proposed project would install two new 1.28 MG water reservoir tanks with associated improvements. The project also includes the maintenance required by FWC at the existing Plant F20 Reservoir (South) after the construction and operation of the new water tanks (F20 East and F20 West).

Implementation of the proposed project would improve the FWC service regarding to existing water demands for domestic uses, fire suppression, and emergency needs. The project would serve existing and planned future development and would not generate growth. Furthermore, no stationary sources are proposed and the ongoing inspections and maintenance for the proposed project would generate minimal vehicle trips. Therefore, operational emissions are less than significant, and no mitigation is required.

Localized Construction Emissions

The nearest sensitive receptors to the project site are residential uses located at least 310 feet (94 meters) to the northeast of the project site. To identify impacts to sensitive receptors, the SCAQMD recommends addressing Localized Significance Thresholds (LSTs) for construction. LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the *Final Localized Significance Threshold Methodology* (dated June 2003

[revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized impacts associated with project-specific level proposed projects.

Since CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily soil disturbance activity possible for each piece of equipment, [Table 3: Equipment-Specific Grading Rates](#) is used to determine the maximum daily disturbed acreage for comparison to LSTs. For this project, the appropriate source receptor area (SRA) for the localized significance thresholds is the Central San Bernardino Valley (SRA 34) area since this area includes the project site. LSTs apply to NO_x, CO, PM₁₀, and PM_{2.5}. The SCAQMD produced look-up tables for projects that disturb areas less than or equal to 5 acres in size. Based on the daily equipment modeled in CalEEMod, project construction is anticipated to disturb approximately 1.5 acres in a single day.

Table 3: Equipment-Specific Grading Rates					
Construction Phase	Equipment Type	Equipment Quantity	Acres Graded per 8-Hour Day	Operating Hours per Day	Acres Graded per Day
Grading	Tractor	1	0.5	8	0.5
	Graders	1	0.5	8	0.5
	Dozers	1	0.5	8	0.5
	Scrapers	0	1	8	0
Total Acres Graded per Day					1.5
Source: CalEEMod version 2020.4.0.					

The SCAQMD's methodology indicates that "off-site mobile emissions from the project should not be included in the emissions compared to LSTs." Therefore, for purposes of the construction LST analysis, only emissions included in the CalEEMod "on-site" emissions outputs were considered. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. The nearest sensitive receptor to the project site is a residential unit located approximately 310 feet (94 meters) to the northeast of the project site. Therefore, the LSTs for 1.5 acres at 94 meters were interpolated and used for the construction analysis which is consistent with the SCAQMD LST methodology.

[Table 4: Localized Significance of Construction Emissions](#), presents the results of localized emissions during construction activity. [Table 4](#) shows that the emissions of these pollutants on the peak day of construction would not result in significant concentrations of pollutants at nearby sensitive receptors. Therefore, significant impacts would not occur concerning LSTs during construction activities.

Table 4: Localized Significance of Construction Emissions				
Source/Activity	Emissions (pounds per day) ^{1,2}			
	NO _x	CO	PM ₁₀	PM _{2.5}
Site Preparation (2024)	5.60	3.89	0.40	0.21
Grading (2024)	9.73	5.55	2.38	1.32
Construction (2024)	8.34	10.33	0.38	0.35
Construction (2025)	7.53	10.25	0.32	0.30

Table 4: Localized Significance of Construction Emissions				
Source/Activity	Emissions (pounds per day) ^{1,2}			
	NO _x	CO	PM ₁₀	PM _{2.5}
Paving (2025)	4.92	7.03	0.22	0.20
Architectural Coating (2022)	1.15	1.81	0.05	0.05
<i>Maximum Daily Emissions</i>	<i>9.73</i>	<i>10.33</i>	<i>2.38</i>	<i>1.32</i>
SCAQMD LST (for 1.5 acres at 94 meters)	229	2,298	35	10
Maximum Daily Emissions Exceed SCAQMD Threshold?	No	No	No	No
NO _x = Nitrogen Oxides; CO = Carbon Monoxide; PM ₁₀ = Particulate Matter 10 microns in diameter or less; PM _{2.5} = Particulate Matter 2.5 microns in diameter or less				
1. CalEEMod version 2020.4.0. Worst-case seasonal maximum daily emissions are reported.				
2. SCAQMD Rule 403 Fugitive Dust applied for construction emissions. The Rule 403 reduction/credits include the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. No mitigation was applied to construction equipment. Refer to Appendix A for Model Data Outputs.				
Source: CalEEMod version 2020.4.0. Refer to Appendix A for model outputs.				

Localized Operational Emissions

According to SCAQMD localized significance threshold methodology, LSTs would apply to the operational phase of a proposed project if the project includes stationary sources or attracts mobile sources that may spend extended periods queuing and idling at the site (e.g., warehouse or transfer facilities). The proposed project does not include such uses. Thus, due to the lack of such emissions, no long-term localized significance threshold analysis is necessary. Operational LST impacts would be less than significant in this regard.

Carbon Monoxide Hotspots

Localized high levels of CO (CO hotspot) are associated with traffic congestion and idling or slow-moving vehicles. Impacts related to CO hotspots would be less than significant because the proposed project is anticipated to generate approximately one vehicle trip per month for maintenance activities and would only have short-term temporary traffic impacts during construction. The primary purpose of the project is to meet necessary water storage required for the community to meet existing water demands for domestic uses, fire suppression, and emergency needs. Nearby residents would not be exposed to substantial pollutant concentrations and the impact would be less than significant.

Cumulative Impact

The SCAQMD has not established separate significance thresholds for cumulative operational emissions. The nature of air emissions is largely a cumulative impact. As a result, no single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, individual project emissions contribute to existing cumulatively significant adverse air quality impacts.

The SCAQMD developed the operational thresholds of significance based on the level above which individual project emissions would result in a cumulatively considerable contribution to the Basin's existing air quality conditions. Therefore, a project that exceeds the SCAQMD operational thresholds would also be a cumulatively considerable contribution to a significant cumulative impact.

As discussed above, the proposed project would not exceed SCAQMD thresholds. As a result, emissions associated with the proposed project would not result in a cumulatively considerable contribution to significant cumulative air quality impacts. Additionally, adherence to SCAQMD rules and regulations would alleviate potential impacts related to cumulative conditions on a project-by-project basis. Project operations would not contribute a cumulatively considerable net increase of any nonattainment criteria pollutant.

Greenhouse Gas Analysis

Project-Related Sources of Greenhouse Gases

The project would include direct and indirect GHG emissions from project construction and operations. Construction is considered a direct source since these emissions occur at the site. Direct operational-related GHG emissions for a project would generally include emissions from area and mobile sources, while indirect emissions are from energy consumption, water demand, and solid waste. The proposed project would install and operate two water tank reservoirs to enhance the service to existing local communities.

Construction GHG Emissions

Construction of the project would result in direct GHG emissions from the project site. Construction GHG emissions are typically summed and amortized over the lifetime of the project (assumed to be 30 years).¹ Total GHG emissions generated during all phases of construction were combined and are presented in [Table 5: Construction Greenhouse Gas Emissions](#). The CalEEMod outputs are contained within [Appendix A](#). As shown in [Table 5](#), the project total construction emissions would result in 308 Metric Tones CO₂ Equivalent (MTCO₂e) (approximately 10.27 MTCO₂e/year when amortized over 30 years). Once construction is complete, the generation of these GHG emissions would cease.

Table 5: Construction Greenhouse Gas Emissions	
Construction	MTCO₂e per Year
2024	252
2025	56
Total GHG Emission (2024 and 2025)	308
30-Year Amortized Construction	10.27
Source: CalEEMod version 2020.4.0. Refer to Appendix A for model data outputs.	

¹ The project lifetime is based on the standard 30-year assumption of the South Coast Air Quality Management District (South Coast Air Quality Management District, *Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #13*, August 26, 2009).

Operational GHG Emissions

Operational or long-term emissions occur over the life of the project. Total GHG emissions associated with the project are summarized in [Table 6: Project Greenhouse Gas Emissions](#). The project proposes the installation and operation of two water tank reservoirs to enhance the service to existing local communities. There would be routine maintenance visits approximately one time per month which would generate negligible GHG emissions. The required electricity for the new proposed water reservoirs would be provided by the existing generator onsite which feeds the existing water tank to the south of the proposed project site, thus there would be no GHG emissions regarding area sources. The project would not result in the consumption of water, as the project would store water for consumption by the end user. Therefore, the project would not generate GHG emissions associated with water use. The project is not anticipated to be an operational solid waste generator, therefore, there would be no GHG emissions associated with solid waste disposal.

As summarized above, operational GHG emissions would be negligible. Therefore, the primary source of project GHG emissions would be construction activities. As shown in [Table 6](#), total project GHG emissions would be 10.27 MTCO₂e annually. This would not exceed the SCAQMD's 3,000 MTCO₂e per year screening threshold. Therefore, GHG impacts from construction and operation of the proposed project would be less than significant, and no mitigation measures are required. As the proposed project's GHG emissions would be well below the SCAQMD's 3,000 MTCO₂e/yr threshold, it would not interfere with the State's goals for reducing GHG emissions.

Table 6: Project Greenhouse Gas Emissions	
Emissions Source	MTCO₂e per Year
Construction Amortized Over 30 Years	10.27
Area Source	0
Energy	0
Mobile	0
Waste	0
Water and Wastewater	0
Total	10.27
<i>SCAQMD Threshold</i>	<i>3,000</i>
Exceeds Threshold?	No
Source: CalEEMod version 2020.4.0. Refer to Appendix AIR for model outputs.	

Consistency with Applicable GHG Plans, Policies, or Regulations

As described above, implementation of the proposed project would enhance the water service to local communities. The water reservoirs have been slated to serve existing and planned future

development and does not have the capacity to serve development beyond what is already planned/approved for in the area. The proposed project does not include any new housing. As such, the project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions and impacts are less than significant, and no mitigation is required.

Cumulative Impact

It is generally the case that an individual project of this size and nature is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory. GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective. The additive effect of project-related GHGs would not result in a reasonably foreseeable cumulatively considerable contribution to global climate change. In addition, the proposed project would also be subject to all applicable regulatory requirements, which would further reduce GHG emissions. As discussed above, the project would not conflict with any GHG reduction plans. Therefore, the project's cumulative contribution of GHG emissions would be less than significant and the project's cumulative GHG impacts would also be less than cumulatively considerable.

Conclusion

As discussed above, the proposed project would comply with the applicable State, Regional, and local goals and policies with regard to reducing GHG emissions. Therefore, the project would not conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing GHG emissions, and a less than significant impact would occur. Furthermore, the project implementation would result in less than significant construction and operation air quality and GHG impacts. No mitigation measures would be required. Therefore, the proposed project would not result in significant effects.

Appendix A

Air Quality and GHG Data

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Fontana Plant-F20 Reservoirs

San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	0.98	Acre	0.98	42,688.80	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10	Operational Year	2025		
Utility Company	Southern California Edison				

CO2 Intensity (lb/MW/hr)	390.98	CH4 Intensity (lb/MW/hr)	0.033	N2O Intensity (lb/MW/hr)	0.004
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1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - per construction schedule

Off-road Equipment - Estimated equipment

Off-road Equipment -

Trips and VMT -

Grading -

Construction Off-road Equipment Mitigation - SCAQMD rule compliance

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tbConstDustMitigation	CleanPavedRoadPercentReduction	0	6

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tb ConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tb ConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tb ConstructionPhase	NumDays	5.00	66.00
tb ConstructionPhase	NumDays	100.00	198.00
tb ConstructionPhase	NumDays	2.00	43.00
tb ConstructionPhase	NumDays	5.00	41.00
tb ConstructionPhase	NumDays	1.00	21.00
tb Grading	MaterialImported	0.00	8,500.00

2.0 Emissions Summary

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

Year	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
lb/day																
2024	1.0070	12.4745	11.0586	0.0285	5.8566	0.4288	6.2854	2.7144	0.3955	3.1099	0.0000	2,931.703 ⁶	2,931.703 ⁶	0.6527	0.2375	3,015.118 ⁰
2025	0.9421	7.8057	10.9371	0.0235	0.2461	0.3251	0.5712	0.0663	0.2992	0.3655	0.0000	2,301.005 ³	2,301.005 ³	0.6523	0.0229	2,324.137 ⁷
Maximum	1.0070	12.4745	11.0586	0.0285	5.8566	0.4288	6.2854	2.7144	0.3955	3.1099	0.0000	2,931.703 ⁶	2,931.703 ⁶	0.6527	0.2375	3,015.118 ⁰

Mitigated Construction

Year	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
lb/day																
2024	1.0070	12.4745	11.0586	0.0285	2.4744	0.4288	2.9032	1.0894	0.3955	1.4849	0.0000	2,931.703 ⁶	2,931.703 ⁶	0.6527	0.2375	3,015.118 ⁰
2025	0.9421	7.8057	10.9371	0.0235	0.2396	0.3251	0.5588	0.0632	0.2992	0.3624	0.0000	2,301.005 ³	2,301.005 ³	0.6523	0.0229	2,324.137 ⁷
Maximum	1.0070	12.4745	11.0586	0.0285	2.4744	0.4288	2.9032	1.0894	0.3955	1.4849	0.0000	2,931.703 ⁶	2,931.703 ⁶	0.6527	0.2375	3,015.118 ⁰

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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
Percent Reduction	0.00	0.00	0.00	0.00	55.63	0.00	49.51	58.55	0.00	46.85	0.00	0.00	0.00	0.00	0.00	0.00

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

Category	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
lb/day																
Area	0.0184	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.1000e-004	2.1000e-004	0.0000		2.3000e-004
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
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0184	0.0000	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.1000e-004	2.1000e-004	0.0000	0.0000	2.3000e-004

Mitigated Operational

Category	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
lb/day																
Area	0.0184	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.1000e-004	2.1000e-004	0.0000		2.3000e-004
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
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0184	0.0000	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.1000e-004	2.1000e-004	0.0000	0.0000	2.3000e-004

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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
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	2/1/2024	2/29/2024	5	21	
2	Grading	Grading	3/1/2024	4/30/2024	5	43	
3	Infrastructure and Tank Installation	Building Construction	5/1/2024	1/31/2025	5	198	
4	Paving	Paving	2/1/2025	3/31/2025	5	41	
5	Architectural Coating	Architectural Coating	4/1/2025	7/1/2025	5	66	

Acres of Grading (Site Preparation Phase): 10.5

Acres of Grading (Grading Phase): 32.25

Acres of Paving: 0.98

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 2,561 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Infrastructure and Tank Installation	Cranes	1	4.00	231	0.29

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Infrastructure and Tank Installation	Excavators	1	4.00	158	0.38
Infrastructure and Tank Installation	Forklifts	2	6.00	89	0.20
Infrastructure and Tank Installation	Off-Highway Trucks	1	4.00	402	0.38
Infrastructure and Tank Installation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
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	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	1,063.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Infrastructure and Tank Installation	7	18.00	7.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2024

Unmitigated Construction On-Site

Category	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
	lb/day															
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.4985	5.6040	3.8921	9.7300e-003		0.2012	0.2012		0.1851	0.1851		942.2742	942.2742	0.3048		949.8930
Total	0.4985	5.6040	3.8921	9.7300e-003	0.5303	0.2012	0.7315	0.0573	0.1851	0.2424		942.2742	942.2742	0.3048		949.8930

Unmitigated Construction Off-Site

Category	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
	lb/day															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0182	0.0105	0.1756	4.8000e-004	0.0559	2.7000e-004	0.0562	0.0148	2.4000e-004	0.0151		49.9875	49.9875	1.1000e-003	1.1100e-003	50.3469
Total	0.0182	0.0105	0.1756	4.8000e-004	0.0559	2.7000e-004	0.0562	0.0148	2.4000e-004	0.0151		49.9875	49.9875	1.1000e-003	1.1100e-003	50.3469

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2024

Mitigated Construction On-Site

Category	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
lb/day																
Fugitive Dust					0.1965	0.0000	0.1965	0.0212	0.0000	0.0212			0.0000			0.0000
Off-Road	0.4985	5.6040	3.8921	9.7300e-003		0.2012	0.2012		0.1851	0.1851	0.0000	942.2742	942.2742	0.3048		949.8930
Total	0.4985	5.6040	3.8921	9.7300e-003	0.1965	0.2012	0.3977	0.0212	0.1851	0.2063	0.0000	942.2742	942.2742	0.3048		949.8930

Mitigated Construction Off-Site

Category	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
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0182	0.0105	0.1756	4.8000e-004	0.0530	2.7000e-004	0.0532	0.0141	2.4000e-004	0.0144		49.9875	49.9875	1.1000e-003	1.1100e-003	50.3469
Total	0.0182	0.0105	0.1756	4.8000e-004	0.0530	2.7000e-004	0.0532	0.0141	2.4000e-004	0.0144		49.9875	49.9875	1.1000e-003	1.1100e-003	50.3469

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2024

Unmitigated Construction On-Site

Category	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
	lb/day										lb/day					
Fugitive Dust					5.3343	0.0000	5.3343	2.5719	0.0000	2.5719			0.0000			0.0000
Off-Road	0.9132	9.7297	5.5468	0.0141		0.4001	0.4001		0.3681	0.3681		1,364.662 ³	1,364.662 ³	0.4414		1,375.696 ²
Total	0.9132	9.7297	5.5468	0.0141	5.3343	0.4001	5.7344	2.5719	0.3681	2.9400		1,364.662 ³	1,364.662 ³	0.4414		1,375.696 ²

Unmitigated Construction Off-Site

Category	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
	lb/day										lb/day					
Hauling	0.0590	2.7280	0.8303	0.0137	0.4329	0.0282	0.4611	0.1187	0.0270	0.1457		1,487.061 ³	1,487.061 ³	0.0627	0.2357	1,558.866 ⁷
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	0.0291	0.0168	0.2809	7.8000e-004	0.0894	4.2000e-004	0.0899	0.0237	3.9000e-004	0.0241		79.9800	79.9800	1.7700e-003	1.7800e-003	80.5551
Total	0.0881	2.7447	1.1112	0.0144	0.5223	0.0286	0.5510	0.1424	0.0274	0.1698		1,567.041 ³	1,567.041 ³	0.0645	0.2375	1,639.421 ⁷

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2024

Mitigated Construction On-Site

Category	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
	lb/day															
Fugitive Dust					1.9764	0.0000	1.9764	0.9529	0.0000	0.9529			0.0000			0.0000
Off-Road	0.9132	9.7297	5.5468	0.0141		0.4001	0.4001		0.3681	0.3681	0.0000	1.364.662 ₃	1.364.662 ₃	0.4414		1.375.696 ₂
Total	0.9132	9.7297	5.5468	0.0141	1.9764	0.4001	2.3765	0.9529	0.3681	1.3210	0.0000	1.364.662 ₃	1.364.662 ₃	0.4414		1.375.696 ₂

Mitigated Construction Off-Site

Category	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
	lb/day															
Hauling	0.0590	2.7280	0.8303	0.0137	0.4133	0.0282	0.4415	0.1139	0.0270	0.1409	1.487.061 ₃	1.487.061 ₃	0.0627	0.2357		1.558.866 ₇
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	0.0291	0.0168	0.2809	7.8000e-004	0.0848	4.2000e-004	0.0852	0.0226	3.9000e-004	0.0230	79.9800	79.9800	1.7700e-003	1.7800e-003		80.5551
Total	0.0881	2.7447	1.1112	0.0144	0.4981	0.0286	0.5267	0.1365	0.0274	0.1639	1.567.041 ₃	1.567.041 ₃	0.0645	0.2375		1.639.421 ₇

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Infrastructure and Tank Installation - 2024****Unmitigated Construction On-Site**

Category	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
	lb/day															
Off-Road	0.9337	8.3393	10.3252	0.0206		0.3768	0.3768		0.3467	0.3467		1,995,291 3	1,995,291 3	0.6453		2,011,424 2
Total	0.9337	8.3393	10.3252	0.0206		0.3768	0.3768		0.3467	0.3467		1,995,291 3	1,995,291 3	0.6453		2,011,424 2

Unmitigated Construction Off-Site

Category	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
	lb/day															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.0000e-003	0.2477	0.1013	1.2400e-003	0.0449	1.8200e-003	0.0467	0.0129	1.7400e-003	0.0147		132,4921	132,4921	3.4000e-003	0.0196	138,4069
Worker	0.0654	0.0377	0.6321	1.7400e-003	0.2012	9.6000e-004	0.2022	0.0534	8.8000e-004	0.0542		179,9550	179,9550	3.9700e-003	4.0100e-003	181,2489
Total	0.0734	0.2854	0.7334	2.9800e-003	0.2461	2.7800e-003	0.2488	0.0663	2.6200e-003	0.0689		312,4470	312,4470	7.3700e-003	0.0236	319,6558

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Infrastructure and Tank Installation - 2024

Mitigated Construction On-Site

Category	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
Off-Road	0.9337	8.3393	10.3252	0.0206		0.3768	0.3768		0.3467	0.3467	0.0000	1,995,291 ³	1,995,291 ³	0.6453		2,011,424 ²
Total	0.9337	8.3393	10.3252	0.0206		0.3768	0.3768		0.3467	0.3467	0.0000	1,995,291 ³	1,995,291 ³	0.6453		2,011,424 ²

Mitigated Construction Off-Site

Category	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
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	8.0000e-003	0.2477	0.1013	1.2400e-003	0.0429	1.8200e-003	0.0448	0.0124	1.7400e-003	0.0142		132,4921	132,4921	3.4000e-003	0.0196	138,4069
Worker	0.0654	0.0377	0.6321	1.7400e-003	0.1907	9.6000e-004	0.1917	0.0508	8.8000e-004	0.0517		179,9550	179,9550	3.9700e-003	4.0100e-003	181,2489
Total	0.0734	0.2854	0.7334	2.9800e-003	0.2336	2.7800e-003	0.2364	0.0632	2.6200e-003	0.0658		312,4470	312,4470	7.3700e-003	0.0236	319,6558

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Infrastructure and Tank Installation - 2025

Unmitigated Construction On-Site

Category	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
lb/day																
Off-Road	0.8733	7.5258	10.2506	0.0206		0.3224	0.3224		0.2966	0.2966		1,995,577 ⁷	1,995,577 ⁷	0.6454		2,011,713 ⁰
Total	0.8733	7.5258	10.2506	0.0206		0.3224	0.3224		0.2966	0.2966		1,995,577 ⁷	1,995,577 ⁷	0.6454		2,011,713 ⁰

Unmitigated Construction Off-Site

Category	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
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.8500e-003	0.2462	0.0997	1.2100e-003	0.0449	1.8100e-003	0.0467	0.0129	1.7400e-003	0.0147		129,9162	129,9162	3.3100e-003	0.0192	135,7121
Worker	0.0609	0.0337	0.5868	1.6600e-003	0.2012	9.1000e-004	0.2021	0.0534	8.4000e-004	0.0542		175,5113	175,5113	3.5700e-003	3.7300e-003	176,7126
Total	0.0687	0.2799	0.6865	2.8900e-003	0.2461	2.7200e-003	0.2488	0.0663	2.5800e-003	0.0688		305,4275	305,4275	6.8800e-003	0.0229	312,4247

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Infrastructure and Tank Installation - 2025

Mitigated Construction On-Site

Category	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
lb/day																
Off-Road	0.8733	7.5258	10.2506	0.0206		0.3224	0.3224		0.2966	0.2966	0.0000	1,995,577 ⁷	1,995,577 ⁷	0.6454		2,011,713 ⁰
Total	0.8733	7.5258	10.2506	0.0206		0.3224	0.3224		0.2966	0.2966	0.0000	1,995,577 ⁷	1,995,577 ⁷	0.6454		2,011,713 ⁰

Mitigated Construction Off-Site

Category	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
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.8500e-003	0.2462	0.0997	1.2100e-003	0.0429	1.8100e-003	0.0447	0.0124	1.7400e-003	0.0142		129,9162	129,9162	3.3100e-003	0.0192	135,7121
Worker	0.0609	0.0337	0.5868	1.6600e-003	0.1907	9.1000e-004	0.1916	0.0508	8.4000e-004	0.0516		175,5113	175,5113	3.5700e-003	3.7300e-003	176,7126
Total	0.0687	0.2799	0.6865	2.8900e-003	0.2336	2.7200e-003	0.2364	0.0632	2.5800e-003	0.0658		305,4275	305,4275	6.8800e-003	0.0229	312,4247

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2025

Unmitigated Construction On-Site

Category	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
lb/day																
Off-Road	0.5638	4.9206	7.0257	0.0113		0.2186	0.2186		0.2046	0.2046		1,036.271 ¹	1,036.271 ¹	0.3019		1,043.817 ⁹
Paving	0.0626					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6264	4.9206	7.0257	0.0113		0.2186	0.2186		0.2046	0.2046		1,036.271 ¹	1,036.271 ¹	0.3019		1,043.817 ⁹

Unmitigated Construction Off-Site

Category	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
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0609	0.0337	0.5868	1.6800e-003	0.2012	9.1000e-004	0.2021	0.0534	8.4000e-004	0.0542		175.5113	175.5113	3.5700e-003	3.7300e-003	176.7126
Total	0.0609	0.0337	0.5868	1.6800e-003	0.2012	9.1000e-004	0.2021	0.0534	8.4000e-004	0.0542		175.5113	175.5113	3.5700e-003	3.7300e-003	176.7126

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2025

Mitigated Construction On-Site

Category	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
lb/day																
Off-Road	0.5638	4.9206	7.0257	0.0113		0.2186	0.2186		0.2046	0.2046	0.0000	1,036.271 ¹	1,036.271 ¹	0.3019		1,043.817 ⁹
Paving	0.0626					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6264	4.9206	7.0257	0.0113		0.2186	0.2186		0.2046	0.2046	0.0000	1,036.271 ¹	1,036.271 ¹	0.3019		1,043.817 ⁹

Mitigated Construction Off-Site

Category	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
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0609	0.0337	0.5868	1.6800e-003	0.1907	9.1000e-004	0.1916	0.0508	8.4000e-004	0.0516		175.5113	175.5113	3.5700e-003	3.7300e-003	176.7126
Total	0.0609	0.0337	0.5868	1.6800e-003	0.1907	9.1000e-004	0.1916	0.0508	8.4000e-004	0.0516		175.5113	175.5113	3.5700e-003	3.7300e-003	176.7126

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2025

Unmitigated Construction On-Site

Category	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
lb/day																
Archit. Coating	0.1799					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	0.3507	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

Unmitigated Construction Off-Site

Category	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
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0135	7.4800e-003	0.1304	3.7000e-004	0.0447	2.0000e-004	0.0449	0.0119	1.9000e-004	0.0120		39.0025	39.0025	7.9000e-004	8.3000e-004	39.2695
Total	0.0135	7.4800e-003	0.1304	3.7000e-004	0.0447	2.0000e-004	0.0449	0.0119	1.9000e-004	0.0120		39.0025	39.0025	7.9000e-004	8.3000e-004	39.2695

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2025

Mitigated Construction On-Site

Category	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
lb/day																
Archit. Coating	0.1799					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	0.3507	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319

Mitigated Construction Off-Site

Category	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
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0135	7.4800e-003	0.1304	3.7000e-004	0.0424	2.0000e-004	0.0426	0.0113	1.9000e-004	0.0115		39.0025	39.0025	7.9000e-004	8.3000e-004	39.2695
Total	0.0135	7.4800e-003	0.1304	3.7000e-004	0.0424	2.0000e-004	0.0426	0.0113	1.9000e-004	0.0115		39.0025	39.0025	7.9000e-004	8.3000e-004	39.2695

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Category	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
	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.543085	0.056300	0.173085	0.134258	0.025645	0.007009	0.011926	0.017481	0.000552	0.000248	0.024848	0.000956	0.004606

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day															
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000			0.0000		0.0000	0.0000	0.0000	0.0000
Total		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

	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															
Mitigated	0.0184	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	2.1000e-004	2.1000e-004	0.0000			2.3000e-004
Unmitigated	0.0184	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	2.1000e-004	2.1000e-004	0.0000			2.3000e-004

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	3.2500e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0151					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.1000e-004	2.1000e-004	0.0000		2.3000e-004
Total	0.0184	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.1000e-004	2.1000e-004	0.0000		2.3000e-004

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.2500e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0151					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	2.1000e-004	2.1000e-004	0.0000			2.3000e-004
Total	0.0184	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	2.1000e-004	2.1000e-004	0.0000			2.3000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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
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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
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Fontana Plant-F20 Reservoirs

San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	0.98	Acre	0.98	42,688.80	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2025
Utility Company	Southern California Edison				

CO2 Intensity (lb/MW/hr)	390.98	CH4 Intensity (lb/MW/hr)	0.033	N2O Intensity (lb/MW/hr)	0.004
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1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - per construction schedule

Off-road Equipment - Estimated equipment

Off-road Equipment -

Trips and VMT -

Grading -

Construction Off-road Equipment Mitigation - SCAQMD rule compliance

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tbConstDustMitigation	CleanPavedRoadPercentReduction	0	6

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tb ConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tb ConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tb ConstructionPhase	NumDays	5.00	66.00
tb ConstructionPhase	NumDays	100.00	198.00
tb ConstructionPhase	NumDays	2.00	43.00
tb ConstructionPhase	NumDays	5.00	41.00
tb ConstructionPhase	NumDays	1.00	21.00
tb Grading	MaterialImported	0.00	8,500.00

2.0 Emissions Summary

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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															
2024	1.0042	12.6230	10.9505	0.0285	5.8566	0.4288	6.2854	2.7144	0.3955	3.1099	0.0000	2,926.459 ⁷	2,926.459 ⁷	0.6527	0.2379	3,009.992 ¹
2025	0.9395	7.8213	10.8376	0.0234	0.2461	0.3252	0.5712	0.0663	0.2992	0.3655	0.0000	2,284.896 ²	2,284.896 ²	0.6523	0.0231	2,308.081 ¹
Maximum	1.0042	12.6230	10.9505	0.0285	5.8566	0.4288	6.2854	2.7144	0.3955	3.1099	0.0000	2,926.459 ⁷	2,926.459 ⁷	0.6527	0.2379	3,009.992 ¹

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day															
2024	1.0042	12.6230	10.9505	0.0285	2.4744	0.4288	2.9032	1.0894	0.3955	1.4849	0.0000	2,926.459 ⁷	2,926.459 ⁷	0.6527	0.2379	3,009.992 ¹
2025	0.9395	7.8213	10.8376	0.0234	0.2396	0.3252	0.5588	0.0632	0.2992	0.3624	0.0000	2,284.896 ²	2,284.896 ²	0.6523	0.0231	2,308.081 ¹
Maximum	1.0042	12.6230	10.9505	0.0285	2.4744	0.4288	2.9032	1.0894	0.3955	1.4849	0.0000	2,926.459 ⁷	2,926.459 ⁷	0.6527	0.2379	3,009.992 ¹

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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
Percent Reduction	0.00	0.00	0.00	0.00	55.63	0.00	49.51	58.55	0.00	46.85	0.00	0.00	0.00	0.00	0.00	0.00

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

Category	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
lb/day																
Area	0.0184	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.1000e-004	2.1000e-004	0.0000		2.3000e-004
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
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0184	0.0000	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.1000e-004	2.1000e-004	0.0000		2.3000e-004

Mitigated Operational

Category	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
lb/day																
Area	0.0184	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.1000e-004	2.1000e-004	0.0000		2.3000e-004
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
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0184	0.0000	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.1000e-004	2.1000e-004	0.0000		2.3000e-004

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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
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	2/1/2024	2/29/2024	5	21	
2	Grading	Grading	3/1/2024	4/30/2024	5	43	
3	Infrastructure and Tank Installation	Building Construction	5/1/2024	1/31/2025	5	198	
4	Paving	Paving	2/1/2025	3/31/2025	5	41	
5	Architectural Coating	Architectural Coating	4/1/2025	7/1/2025	5	66	

Acres of Grading (Site Preparation Phase): 10.5

Acres of Grading (Grading Phase): 32.25

Acres of Paving: 0.98

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 2,561 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Infrastructure and Tank Installation	Cranes	1	4.00	231	0.29

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Infrastructure and Tank Installation	Excavators	1	4.00	158	0.38
Infrastructure and Tank Installation	Forklifts	2	6.00	89	0.20
Infrastructure and Tank Installation	Off-Highway Trucks	1	4.00	402	0.38
Infrastructure and Tank Installation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
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	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	1,063.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Infrastructure and Tank Installation	7	18.00	7.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2024

Unmitigated Construction On-Site

Category	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
	lb/day															
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.4985	5.6040	3.8921	9.7300e-003		0.2012	0.2012		0.1851	0.1851		942.2742	942.2742	0.3048		949.8930
Total	0.4985	5.6040	3.8921	9.7300e-003	0.5303	0.2012	0.7315	0.0573	0.1851	0.2424		942.2742	942.2742	0.3048		949.8930

Unmitigated Construction Off-Site

Category	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
	lb/day															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0175	0.0110	0.1447	4.4000e-004	0.0559	2.7000e-004	0.0562	0.0148	2.4000e-004	0.0151		45.2973	45.2973	1.1100e-003	1.1500e-003	45.6673
Total	0.0175	0.0110	0.1447	4.4000e-004	0.0559	2.7000e-004	0.0562	0.0148	2.4000e-004	0.0151		45.2973	45.2973	1.1100e-003	1.1500e-003	45.6673

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2024

Mitigated Construction On-Site

Category	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
	lb/day															
Fugitive Dust					0.1965	0.0000	0.1965	0.0212	0.0000	0.0212			0.0000			0.0000
Off-Road	0.4985	5.6040	3.8921	9.7300e-003		0.2012	0.2012		0.1851	0.1851	0.0000	942.2742	942.2742	0.3048		949.8930
Total	0.4985	5.6040	3.8921	9.7300e-003	0.1965	0.2012	0.3977	0.0212	0.1851	0.2063	0.0000	942.2742	942.2742	0.3048		949.8930

Mitigated Construction Off-Site

Category	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
	lb/day															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0175	0.0110	0.1447	4.4000e-004	0.0530	2.7000e-004	0.0532	0.0141	2.4000e-004	0.0144		45.2973	45.2973	1.1100e-003	1.1500e-003	45.6673
Total	0.0175	0.0110	0.1447	4.4000e-004	0.0530	2.7000e-004	0.0532	0.0141	2.4000e-004	0.0144		45.2973	45.2973	1.1100e-003	1.1500e-003	45.6673

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2024

Unmitigated Construction On-Site

Category	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
	lb/day										lb/day					
Fugitive Dust					5.3343	0.0000	5.3343	2.5719	0.0000	2.5719			0.0000			0.0000
Off-Road	0.9132	9.7297	5.5468	0.0141		0.4001	0.4001		0.3681	0.3681		1,364.662 ³	1,364.662 ³	0.4414		1,375.696 ²
Total	0.9132	9.7297	5.5468	0.0141	5.3343	0.4001	5.7344	2.5719	0.3681	2.9400		1,364.662 ³	1,364.662 ³	0.4414		1,375.696 ²

Unmitigated Construction Off-Site

Category	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
	lb/day										lb/day					
Hauling	0.0545	2.8756	0.8452	0.0137	0.4329	0.0283	0.4612	0.1187	0.0270	0.1458		1,489.321 ⁸	1,489.321 ⁸	0.0625	0.2361	1,561.228 ¹
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	0.0281	0.0176	0.2315	7.0000e-004	0.0894	4.2000e-004	0.0899	0.0237	3.9000e-004	0.0241		72.4756	72.4756	1.7700e-003	1.8400e-003	73.0677
Total	0.0826	2.8933	1.0766	0.0144	0.5223	0.0287	0.5510	0.1424	0.0274	0.1699		1,561.797 ⁴	1,561.797 ⁴	0.0643	0.2379	1,634.295 ⁸

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2024

Mitigated Construction On-Site

Category	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
lb/day																
Fugitive Dust					1.9764	0.0000	1.9764	0.9529	0.0000	0.9529			0.0000			0.0000
Off-Road	0.9132	9.7297	5.5468	0.0141		0.4001	0.4001		0.3681	0.3681	0.0000	1,364.662 ³	1,364.662 ³	0.4414		1,375.696 ²
Total	0.9132	9.7297	5.5468	0.0141	1.9764	0.4001	2.3765	0.9529	0.3681	1.3210	0.0000	1,364.662 ³	1,364.662 ³	0.4414		1,375.696 ²

Mitigated Construction Off-Site

Category	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
lb/day																
Hauling	0.0545	2.8756	0.8452	0.0137	0.4133	0.0283	0.4416	0.1139	0.0270	0.1409	1,489.321 ⁸	1,489.321 ⁸	0.0625	0.2361		1,561.228 ¹
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	0.0281	0.0176	0.2315	7.0000e-004	0.0848	4.2000e-004	0.0852	0.0226	3.9000e-004	0.0230	72.4756	72.4756	1.7700e-003	1.8400e-003		73.0677
Total	0.0826	2.8933	1.0766	0.0144	0.4981	0.0287	0.5267	0.1365	0.0274	0.1639	1,561.797 ⁴	1,561.797 ⁴	0.0643	0.2379		1,634.295 ⁸

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Infrastructure and Tank Installation - 2024

Unmitigated Construction On-Site

Category	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
Off-Road	0.9337	8.3393	10.3252	0.0206		0.3768	0.3768		0.3467	0.3467		1,995,291 3	1,995,291 3	0.6453		2,011,424 2
Total	0.9337	8.3393	10.3252	0.0206		0.3768	0.3768		0.3467	0.3467		1,995,291 3	1,995,291 3	0.6453		2,011,424 2

Unmitigated Construction Off-Site

Category	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
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	7.4300e-003	0.2616	0.1045	1.2400e-003	0.0449	1.8200e-003	0.0467	0.0129	1.7400e-003	0.0147		132,8159	132,8159	3.3800e-003	0.0196	138,7480
Worker	0.0631	0.0396	0.5209	1.5800e-003	0.2012	9.6000e-004	0.2022	0.0534	8.8000e-004	0.0542		163,0702	163,0702	3.9900e-003	4.1400e-003	164,4024
Total	0.0706	0.3013	0.6253	2.8200e-003	0.2461	2.7800e-003	0.2488	0.0663	2.6200e-003	0.0689		295,8860	295,8860	7.3700e-003	0.0238	303,1504

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Infrastructure and Tank Installation - 2024

Mitigated Construction On-Site

Category	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
Off-Road	0.9337	8.3393	10.3252	0.0206		0.3768	0.3768		0.3467	0.3467	0.0000	1,995,291 3	1,995,291 3	0.6453		2,011,424 2
Total	0.9337	8.3393	10.3252	0.0206		0.3768	0.3768		0.3467	0.3467	0.0000	1,995,291 3	1,995,291 3	0.6453		2,011,424 2

Mitigated Construction Off-Site

Category	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
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
Vendor	7.4300e-003	0.2616	0.1045	1.2400e-003	0.0429	1.8200e-003	0.0448	0.0124	1.7400e-003	0.0142		132,8159	132,8159	3.3800e-003	0.0196	138,7480
Worker	0.0631	0.0396	0.5209	1.5800e-003	0.1907	9.6000e-004	0.1917	0.0508	8.8000e-004	0.0517		163,0702	163,0702	3.9900e-003	4.1400e-003	164,4024
Total	0.0706	0.3013	0.6253	2.8200e-003	0.2336	2.7800e-003	0.2364	0.0632	2.6200e-003	0.0659		295,8860	295,8860	7.3700e-003	0.0238	303,1504

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Infrastructure and Tank Installation - 2025

Unmitigated Construction On-Site

Category	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
lb/day																
Off-Road	0.8733	7.5258	10.2506	0.0206		0.3224	0.3224		0.2966	0.2966		1,995.5777	1,995.5777	0.6454		2,011.7130
Total	0.8733	7.5258	10.2506	0.0206		0.3224	0.3224		0.2966	0.2966		1,995.5777	1,995.5777	0.6454		2,011.7130

Unmitigated Construction Off-Site

Category	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
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.2800e-003	0.2601	0.1029	1.2100e-003	0.0449	1.8200e-003	0.0467	0.0129	1.7400e-003	0.0147		130.2368	130.2368	3.2800e-003	0.0192	136.0495
Worker	0.0589	0.0354	0.4841	1.5300e-003	0.2012	9.1000e-004	0.2021	0.0534	8.4000e-004	0.0542		159.0817	159.0817	3.5900e-003	3.8500e-003	160.3186
Total	0.0662	0.2954	0.5870	2.7400e-003	0.2461	2.7300e-003	0.2488	0.0663	2.5800e-003	0.0689		289.3185	289.3185	6.8700e-003	0.0231	296.3681

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Infrastructure and Tank Installation - 2025

Mitigated Construction On-Site

Category	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
lb/day																
Off-Road	0.8733	7.5258	10.2506	0.0206		0.3224	0.3224		0.2966	0.2966	0.0000	1,995.5777	1,995.5777	0.6454		2,011.7130
Total	0.8733	7.5258	10.2506	0.0206		0.3224	0.3224		0.2966	0.2966	0.0000	1,995.5777	1,995.5777	0.6454		2,011.7130

Mitigated Construction Off-Site

Category	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
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.2800e-003	0.2601	0.1029	1.2100e-003	0.0429	1.8200e-003	0.0448	0.0124	1.7400e-003	0.0142		130.2368	130.2368	3.2800e-003	0.0192	136.0495
Worker	0.0589	0.0354	0.4841	1.5300e-003	0.1907	9.1000e-004	0.1916	0.0508	8.4000e-004	0.0516		159.0817	159.0817	3.5900e-003	3.8500e-003	160.3186
Total	0.0662	0.2954	0.5870	2.7400e-003	0.2336	2.7300e-003	0.2364	0.0632	2.5800e-003	0.0658		289.3185	289.3185	6.8700e-003	0.0231	296.3681

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2025

Unmitigated Construction On-Site

Category	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
lb/day																
Off-Road	0.5638	4.9206	7.0257	0.0113		0.2186	0.2186		0.2046	0.2046		1,036.271 ¹	1,036.271 ¹	0.3019		1,043.817 ⁹
Paving	0.0626					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6264	4.9206	7.0257	0.0113		0.2186	0.2186		0.2046	0.2046		1,036.271 ¹	1,036.271 ¹	0.3019		1,043.817 ⁹

Unmitigated Construction Off-Site

Category	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
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0589	0.0354	0.4841	1.5300e-003	0.2012	9.1000e-004	0.2021	0.0534	8.4000e-004	0.0542		159.0817	159.0817	3.5900e-003	3.8500e-003	160.3186
Total	0.0589	0.0354	0.4841	1.5300e-003	0.2012	9.1000e-004	0.2021	0.0534	8.4000e-004	0.0542		159.0817	159.0817	3.5900e-003	3.8500e-003	160.3186

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2025

Mitigated Construction On-Site

Category	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
lb/day																
Off-Road	0.5638	4.9206	7.0257	0.0113		0.2186	0.2186		0.2046	0.2046	0.0000	1,036.271 ¹	1,036.271 ¹	0.3019		1,043.817 ⁹
Paving	0.0626					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6264	4.9206	7.0257	0.0113		0.2186	0.2186		0.2046	0.2046	0.0000	1,036.271¹	1,036.271¹	0.3019		1,043.817⁹

Mitigated Construction Off-Site

Category	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
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0589	0.0354	0.4841	1.5300e-003	0.1907	9.1000e-004	0.1916	0.0508	8.4000e-004	0.0516		159.0817	159.0817	3.5900e-003	3.8500e-003	160.3186
Total	0.0589	0.0354	0.4841	1.5300e-003	0.1907	9.1000e-004	0.1916	0.0508	8.4000e-004	0.0516		159.0817	159.0817	3.5900e-003	3.8500e-003	160.3186

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2025

Unmitigated Construction On-Site

Category	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
lb/day																
Archit. Coating	0.1799					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	0.3507	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

Unmitigated Construction Off-Site

Category	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
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0131	7.8600e-003	0.1076	3.4000e-004	0.0447	2.0000e-004	0.0449	0.0119	1.9000e-004	0.0120		35.3515	35.3515	8.0000e-004	8.6000e-004	35.6264
Total	0.0131	7.8600e-003	0.1076	3.4000e-004	0.0447	2.0000e-004	0.0449	0.0119	1.9000e-004	0.0120		35.3515	35.3515	8.0000e-004	8.6000e-004	35.6264

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2025

Mitigated Construction On-Site

Category	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
lb/day																
Archit. Coating	0.1799					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	0.3507	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319

Mitigated Construction Off-Site

Category	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
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0131	7.8600e-003	0.1076	3.4000e-004	0.0424	2.0000e-004	0.0426	0.0113	1.9000e-004	0.0115		35.3515	35.3515	8.0000e-004	8.6000e-004	35.6264
Total	0.0131	7.8600e-003	0.1076	3.4000e-004	0.0424	2.0000e-004	0.0426	0.0113	1.9000e-004	0.0115		35.3515	35.3515	8.0000e-004	8.6000e-004	35.6264

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Category	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
	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.543085	0.056300	0.173085	0.134258	0.025645	0.007009	0.011926	0.017481	0.000552	0.000248	0.024848	0.000956	0.004606

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day															
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000			0.0000		0.0000	0.0000	0.0000	0.0000
Total		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

	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															
Mitigated	0.0184	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	2.1000e-004	2.1000e-004	0.0000			2.3000e-004
Unmitigated	0.0184	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	2.1000e-004	2.1000e-004	0.0000			2.3000e-004

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	3.2500e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0151					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.1000e-004	2.1000e-004	0.0000		2.3000e-004
Total	0.0184	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.1000e-004	2.1000e-004	0.0000		2.3000e-004

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.2500e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0151					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	2.1000e-004	2.1000e-004	0.0000			2.3000e-004
Total	0.0184	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	2.1000e-004	2.1000e-004	0.0000			2.3000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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
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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
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Fontana Plant-F20 Reservoirs
San Bernardino-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	0.98	Acre	0.98	42,688.80	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10	Operational Year	2025		
Utility Company	Southern California Edison				

CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004
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1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - per construction schedule

Off-road Equipment - Estimated equipment

Off-road Equipment -

Trips and VMT -

Grading -

Construction Off-road Equipment Mitigation - SCAQMD rule compliance

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tbConstDustMitigation	CleanPavedRoadPercentReduction	0	6

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tb ConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tb ConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tb ConstructionPhase	NumDays	5.00	66.00
tb ConstructionPhase	NumDays	100.00	198.00
tb ConstructionPhase	NumDays	2.00	43.00
tb ConstructionPhase	NumDays	5.00	41.00
tb ConstructionPhase	NumDays	1.00	21.00
tb Grading	MaterialImported	0.00	8,500.00

2.0 Emissions Summary

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

Year	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
tons/yr																
2024	0.1143	1.0867	1.1451	2.7700e-003	0.1530	0.0446	0.1976	0.0648	0.0410	0.1058	0.0000	248.6090	248.6090	0.0646	6.5400e-003	252.1736
2025	0.0367	0.2297	0.3427	6.4000e-004	8.2700e-003	9.9500e-003	0.0182	2.2100e-003	9.3600e-003	0.0116	0.0000	55.6620	55.6620	0.0130	3.4000e-004	56.0882
Maximum	0.1143	1.0867	1.1451	2.7700e-003	0.1530	0.0446	0.1976	0.0648	0.0410	0.1058	0.0000	248.6090	248.6090	0.0646	6.5400e-003	252.1736

Mitigated Construction

Year	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
tons/yr																
2024	0.1143	1.0867	1.1451	2.7700e-003	0.0757	0.0446	0.1203	0.0292	0.0410	0.0702	0.0000	248.6087	248.6087	0.0646	6.5400e-003	252.1734
2025	0.0367	0.2297	0.3427	6.4000e-004	7.8500e-003	9.9500e-003	0.0178	2.1000e-003	9.3600e-003	0.0115	0.0000	55.6619	55.6619	0.0130	3.4000e-004	56.0882
Maximum	0.1143	1.0867	1.1451	2.7700e-003	0.0757	0.0446	0.1203	0.0292	0.0410	0.0702	0.0000	248.6087	248.6087	0.0646	6.5400e-003	252.1734

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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
Percent Reduction	0.00	0.00	0.00	0.00	48.19	0.00	36.02	53.28	0.00	30.41	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)										Maximum Mitigated ROG + NOX (tons/quarter)			
1	2-1-2024	4-30-2024	0.3587										0.3587			
2	5-1-2024	7-31-2024	0.3165										0.3165			
3	8-1-2024	10-31-2024	0.3166										0.3166			
4	11-1-2024	1-31-2025	0.3071										0.3071			
5	2-1-2025	4-30-2025	0.1351										0.1351			
6	5-1-2025	7-31-2025	0.0336										0.0336			
		Highest	0.3587										0.3587			

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.3500e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.3500e-003	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.3500e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.3500e-003	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005

	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
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	2/1/2024	2/29/2024	5	21	
2	Grading	Grading	3/1/2024	4/30/2024	5	43	
3	Infrastructure and Tank Installation	Building Construction	5/1/2024	1/31/2025	5	198	

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Paving	Paving	2/1/2025	3/31/2025	5	41
5	Architectural Coating	Architectural Coating	4/1/2025	7/1/2025	5	66

Acres of Grading (Site Preparation Phase): 10.5

Acres of Grading (Grading Phase): 32.25

Acres of Paving: 0.98

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 2,561 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Infrastructure and Tank Installation	Cranes	1	4.00	231	0.29
Infrastructure and Tank Installation	Excavators	1	4.00	158	0.38
Infrastructure and Tank Installation	Forklifts	2	6.00	89	0.20
Infrastructure and Tank Installation	Off-Highway Trucks	1	4.00	402	0.38
Infrastructure and Tank Installation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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		2	5.00	0.00	0.00	14.70	6.90	20.00_LD_Mix	HDT_Mix	HHDT
Grading		3	8.00	0.00	1,063.00	14.70	6.90	20.00_LD_Mix	HDT_Mix	HHDT
Infrastructure and Earth Installation		7	18.00	7.00	0.00	14.70	6.90	20.00_LD_Mix	HDT_Mix	HHDT
Paving		7	18.00	0.00	0.00	14.70	6.90	20.00_LD_Mix	HDT_Mix	HHDT
Architectural Coating		1	4.00	0.00	0.00	14.70	6.90	20.00_LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2024**Unmitigated Construction On-Site**

Category	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
	tons/yr										MT/yr					
Fugitive Dust					5.5700e-003	0.0000	5.5700e-003	6.0000e-004	0.0000	6.0000e-004	0.0000	0.0000	0.0000	0.0000		0.0000
Off-Road	5.2300e-003	0.0588	0.0409	1.0000e-004		2.1100e-003	2.1100e-003		1.9400e-003	1.9400e-003	0.0000	8.9756	8.9756	2.9000e-003	0.0000	9.0482
Total	5.2300e-003	0.0588	0.0409	1.0000e-004	5.5700e-003	2.1100e-003	7.6800e-003	6.0000e-004	1.9400e-003	2.5400e-003	0.0000	8.9756	8.9756	2.9000e-003	0.0000	9.0482

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2024

Unmitigated Construction Off-Site

Category	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
tons/yr										MT/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	1.2000e-004	1.5900e-003	0.0000	5.8000e-004	0.0000	5.8000e-004	1.5000e-004	0.0000	1.6000e-004	0.0000	0.4400	0.4400	1.0000e-005	1.0000e-005	0.4437
Total	1.7000e-004	1.2000e-004	1.5900e-003	0.0000	5.8000e-004	0.0000	5.8000e-004	1.5000e-004	0.0000	1.6000e-004	0.0000	0.4400	0.4400	1.0000e-005	1.0000e-005	0.4437

Mitigated Construction On-Site

Category	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
tons/yr										MT/yr						
Fugitive Dust					2.0600e-003	0.0000	2.0600e-003	2.2000e-004	0.0000	2.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.2300e-003	0.0588	0.0409	1.0000e-004		2.1100e-003	2.1100e-003		1.9400e-003	1.9400e-003	0.0000	8.9756	8.9756	2.9000e-003	0.0000	9.0481
Total	5.2300e-003	0.0588	0.0409	1.0000e-004	2.0600e-003	2.1100e-003	4.1700e-003	2.2000e-004	1.9400e-003	2.1600e-003	0.0000	8.9756	8.9756	2.9000e-003	0.0000	9.0481

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2024

Mitigated Construction Off-Site

Category	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
tons/yr																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	1.2000e-004	1.5900e-003	0.0000	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4400	0.4400	1.0000e-005	1.0000e-005	0.4437
Total	1.7000e-004	1.2000e-004	1.5900e-003	0.0000	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4400	0.4400	1.0000e-005	1.0000e-005	0.4437

3.3 Grading - 2024

Unmitigated Construction On-Site

Category	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
tons/yr																
Fugitive Dust					0.1147	0.0000	0.1147	0.0553	0.0000	0.0553	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0196	0.2092	0.1193	3.0000e-004		8.6000e-003	8.6000e-003		7.9100e-003	7.9100e-003	0.0000	26.6170	26.6170	8.6100e-003	0.0000	26.8322
Total	0.0196	0.2092	0.1193	3.0000e-004	0.1147	8.6000e-003	0.1233	0.0553	7.9100e-003	0.0632	0.0000	26.6170	26.6170	8.6100e-003	0.0000	26.8322

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2024

Unmitigated Construction Off-Site

Category	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
tons/yr																
Hauling	1.2300e-003	0.0620	0.0180	2.9000e-004	9.1500e-003	6.1000e-004	9.7600e-003	2.5100e-003	5.8000e-004	3.1000e-003	0.0000	29.0229	29.0229	1.2200e-003	4.6000e-003	30.4242
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	5.6000e-004	4.0000e-004	5.2200e-003	2.0000e-005	1.8900e-003	1.0000e-005	1.9000e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.4416	1.4416	4.0000e-005	4.0000e-005	1.4535
Total	1.7900e-003	0.0624	0.0232	3.1000e-004	0.0110	6.2000e-004	0.0117	3.0100e-003	5.9000e-004	3.6100e-003	0.0000	30.4644	30.4644	1.2600e-003	4.6400e-003	31.8777

Mitigated Construction On-Site

Category	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
tons/yr																
Fugitive Dust					0.0425	0.0000	0.0425	0.0205	0.0000	0.0205	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0196	0.2092	0.1193	3.0000e-004		8.6000e-003	8.6000e-003		7.9100e-003	7.9100e-003	0.0000	26.6170	26.6170	8.6100e-003	0.0000	26.8322
Total	0.0196	0.2092	0.1193	3.0000e-004	0.0425	8.6000e-003	0.0511	0.0205	7.9100e-003	0.0284	0.0000	26.6170	26.6170	8.6100e-003	0.0000	26.8322

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2024

Mitigated Construction Off-Site

Category	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
tons/yr																
Hauling	1.2300e-003	0.0620	0.0180	2.9000e-004	8.7400e-003	6.1000e-004	9.3500e-003	2.4100e-003	5.8000e-004	2.9900e-003	0.0000	29.0229	29.0229	1.2200e-003	4.6000e-003	30.4242
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	5.6000e-004	4.0000e-004	5.2200e-003	2.0000e-005	1.7900e-003	1.0000e-005	1.8000e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4416	1.4416	4.0000e-005	4.0000e-005	1.4535
Total	1.7900e-003	0.0624	0.0232	3.1000e-004	0.0105	6.2000e-004	0.0112	2.8900e-003	5.9000e-004	3.4800e-003	0.0000	30.4644	30.4644	1.2600e-003	4.6400e-003	31.8777

3.4 Infrastructure and Tank Installation - 2024

Unmitigated Construction On-Site

Category	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
tons/yr																
Off-Road	0.0817	0.7297	0.9035	1.8000e-003		0.0330	0.0330		0.0303	0.0303	0.0000	158.3836	158.3836	0.0512	0.0000	159.6642
Total	0.0817	0.7297	0.9035	1.8000e-003		0.0330	0.0330		0.0303	0.0303	0.0000	158.3836	158.3836	0.0512	0.0000	159.6642

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Infrastructure and Tank Installation - 2024

Unmitigated Construction Off-Site

Category	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
tons/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	6.7000e-004	0.0228	9.0000e-003	1.1000e-004	3.8600e-003	1.6000e-004	4.0200e-003	1.1100e-003	1.5000e-004	1.2700e-003	0.0000	10.5279	10.5279	2.7000e-004	1.5600e-003	10.9982
Worker	5.1000e-003	3.6300e-003	0.0478	1.4000e-004	0.0173	8.0000e-005	0.0174	4.5900e-003	8.0000e-005	4.6600e-003	0.0000	13.2005	13.2005	3.2000e-004	3.4000e-004	13.3095
Total	5.7700e-003	0.0264	0.0568	2.5000e-004	0.0211	2.4000e-004	0.0214	5.7000e-003	2.3000e-004	5.9300e-003	0.0000	23.7284	23.7284	5.9000e-004	1.9000e-003	24.3077

Mitigated Construction On-Site

Category	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
tons/yr																
Off-Road	0.0817	0.7297	0.9035	1.8000e-003	0.0330	0.0330	0.0330	0.0303	0.0303	0.0303	0.0000	158.3834	158.3834	0.0512	0.0000	159.6640
Total	0.0817	0.7297	0.9035	1.8000e-003	0.0330	0.0330	0.0330	0.0303	0.0303	0.0303	0.0000	158.3834	158.3834	0.0512	0.0000	159.6640

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Infrastructure and Tank Installation - 2024

Mitigated Construction Off-Site

Category	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
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	6.7000e-004	0.0228	9.0000e-003	1.1000e-004	3.7000e-003	1.6000e-004	3.8600e-003	1.0700e-003	1.5000e-004	1.2300e-003	0.0000	10.5279	10.5279	2.7000e-004	1.5600e-003	10.9982
Worker	5.1000e-003	3.6300e-003	0.0478	1.4000e-004	0.0164	8.0000e-005	0.0165	4.3700e-003	8.0000e-005	4.4400e-003	0.0000	13.2005	13.2005	3.2000e-004	3.4000e-004	13.3095
Total	5.7700e-003	0.0264	0.0568	2.5000e-004	0.0201	2.4000e-004	0.0203	5.4400e-003	2.3000e-004	5.6700e-003	0.0000	23.7284	23.7284	5.9000e-004	1.9000e-003	24.3077

3.4 Infrastructure and Tank Installation - 2025

Unmitigated Construction On-Site

Category	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
Off-Road	0.0100	0.0866	0.1179	2.4000e-004	3.7100e-003	3.7100e-003	3.7100e-003	3.4100e-003	3.4100e-003	3.4100e-003	0.0000	20.8191	20.8191	6.7300e-003	0.0000	20.9875
Total	0.0100	0.0866	0.1179	2.4000e-004	3.7100e-003	3.7100e-003	3.7100e-003	3.4100e-003	3.4100e-003	3.4100e-003	0.0000	20.8191	20.8191	6.7300e-003	0.0000	20.9875

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Infrastructure and Tank Installation - 2025

Unmitigated Construction Off-Site

Category	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
tons/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	9.0000e-005	2.9800e-003	1.1600e-003	1.0000e-005	5.1000e-004	2.0000e-005	5.3000e-004	1.5000e-004	2.0000e-005	1.7000e-004	0.0000	1.3568	1.3568	3.0000e-005	2.0000e-004	1.4173
Worker	6.2000e-004	4.3000e-003	5.8300e-003	2.0000e-005	2.2700e-003	1.0000e-005	2.2800e-003	6.0000e-004	1.0000e-005	6.1000e-004	0.0000	1.6924	1.6924	4.0000e-005	4.0000e-005	1.7057
Total	7.1000e-004	3.4100e-003	6.9900e-003	3.0000e-005	2.7800e-003	3.0000e-005	2.8100e-003	7.5000e-004	3.0000e-005	7.8000e-004	0.0000	3.0492	3.0492	7.0000e-005	2.4000e-004	3.1231

Mitigated Construction On-Site

Category	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
tons/yr																
Off-Road	0.0100	0.0866	0.1179	2.4000e-004	3.7100e-003	3.7100e-003	3.7100e-003	3.4100e-003	3.4100e-003	3.4100e-003	0.0000	20.8191	20.8191	6.7300e-003	0.0000	20.9874
Total	0.0100	0.0866	0.1179	2.4000e-004	3.7100e-003	3.7100e-003	3.7100e-003	3.4100e-003	3.4100e-003	3.4100e-003	0.0000	20.8191	20.8191	6.7300e-003	0.0000	20.9874

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Infrastructure and Tank Installation - 2025

Mitigated Construction Off-Site

Category	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
tons/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	9.0000e-005	2.9800e-003	1.1600e-003	1.0000e-005	4.9000e-004	2.0000e-005	5.1000e-004	1.4000e-004	2.0000e-005	1.6000e-004	0.0000	1.3568	1.3568	3.0000e-005	2.0000e-004	1.4173
Worker	6.2000e-004	4.3000e-003	5.8300e-003	2.0000e-005	2.1500e-003	1.0000e-005	2.1600e-003	5.7000e-004	1.0000e-005	5.8000e-004	0.0000	1.6924	1.6924	4.0000e-005	4.0000e-005	1.7057
Total	7.1000e-004	3.4100e-003	6.9900e-003	3.0000e-005	2.6400e-003	3.0000e-005	2.6700e-003	7.1000e-004	3.0000e-005	7.4000e-004	0.0000	3.0492	3.0492	7.0000e-005	2.4000e-004	3.1231

3.5 Paving - 2025

Unmitigated Construction On-Site

Category	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
tons/yr																
Off-Road	0.0116	0.1009	0.1440	2.3000e-004	4.4800e-003	4.4800e-003	4.4800e-003	4.1900e-003	4.1900e-003	4.1900e-003	0.0000	19.2718	19.2718	5.6100e-003	0.0000	19.4122
Paving	1.2800e-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
Total	0.0128	0.1009	0.1440	2.3000e-004	4.4800e-003	4.4800e-003	4.4800e-003	4.1900e-003	4.1900e-003	4.1900e-003	0.0000	19.2718	19.2718	5.6100e-003	0.0000	19.4122

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3.5 Paving - 2025

Unmitigated Construction Off-Site

Category	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
tons/yr																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1100e-003	7.6000e-004	0.0104	3.0000e-005	4.0500e-003	2.0000e-005	4.0600e-003	1.0700e-003	2.0000e-005	1.0900e-003	0.0000	3.0169	3.0169	7.0000e-005	7.0000e-005	3.0406
Total	1.1100e-003	7.6000e-004	0.0104	3.0000e-005	4.0500e-003	2.0000e-005	4.0600e-003	1.0700e-003	2.0000e-005	1.0900e-003	0.0000	3.0169	3.0169	7.0000e-005	7.0000e-005	3.0406

Mitigated Construction On-Site

Category	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
tons/yr																
Off-Road	0.0116	0.1009	0.1440	2.3000e-004	4.4800e-003	4.4800e-003	4.4800e-003	4.1900e-003	4.1900e-003	4.1900e-003	0.0000	19.2718	19.2718	5.6100e-003	0.0000	19.4122
Paving	1.2800e-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
Total	0.0128	0.1009	0.1440	2.3000e-004	4.4800e-003	4.4800e-003	4.4800e-003	4.1900e-003	4.1900e-003	4.1900e-003	0.0000	19.2718	19.2718	5.6100e-003	0.0000	19.4122

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2025

Mitigated Construction Off-Site

Category	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
tons/yr																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1100e-003	7.6000e-004	0.0104	3.0000e-005	3.8400e-003	2.0000e-005	3.8500e-003	1.0200e-003	2.0000e-005	1.0400e-003	0.0000	3.0169	3.0169	7.0000e-005	7.0000e-005	3.0406
Total	1.1100e-003	7.6000e-004	0.0104	3.0000e-005	3.8400e-003	2.0000e-005	3.8500e-003	1.0200e-003	2.0000e-005	1.0400e-003	0.0000	3.0169	3.0169	7.0000e-005	7.0000e-005	3.0406

3.6 Architectural Coating - 2025

Unmitigated Construction On-Site

Category	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
tons/yr																
Archit. Coating	5.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.6400e-003	0.0378	0.0597	1.0000e-004		1.7000e-003	1.7000e-003		1.7000e-003	1.7000e-003	0.0000	8.4257	8.4257	4.6000e-004	0.0000	8.4372
Total	0.0116	0.0378	0.0597	1.0000e-004		1.7000e-003	1.7000e-003		1.7000e-003	1.7000e-003	0.0000	8.4257	8.4257	4.6000e-004	0.0000	8.4372

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	2.7000e-004	3.7200e-003	1.0000e-005	1.3700e-003	1.0000e-005	1.3800e-003	3.7000e-004	1.0000e-005	3.7000e-004	0.0000	1.0792	1.0792	2.0000e-005	3.0000e-005	1.0877
Total	4.0000e-004	2.7000e-004	3.7200e-003	1.0000e-005	1.3700e-003	1.0000e-005	1.3800e-003	3.7000e-004	1.0000e-005	3.7000e-004	0.0000	1.0792	1.0792	2.0000e-005	3.0000e-005	1.0877

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated			Mitigated		
Land Use	Weekday	Saturday	Sunday	Annual VMT			Annual VMT		
Other Asphalt Surfaces	0.00	0.00	0.00						
Total	0.00	0.00	0.00						

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.543085	0.056300	0.173085	0.134258	0.025645	0.007009	0.011926	0.017481	0.000552	0.000248	0.024848	0.000956	0.004606

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

[illegible]

Mitigated

[illegible]

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.3500e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Unmitigated	3.3500e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005

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	5.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.7600e-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	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Total	3.3500e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating 004	5.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products 003	2.7600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping 005	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Total	3.3500e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Fontana Plant-F20 Reservoirs - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	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

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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

TECHNICAL MEMORANDUM

DATE: November 25, 2025
TO: Kaitlyn Dodson-Hamilton, Tom Dodson & Associates
FROM: Haseeb Qureshi, Ali Dadabhoy, Urban Crossroads, Inc.
JOB NO: 16872-02 AQ & GHG Assessment



SUBJECT: FONTANA PLANT 20 RESERVOIRS AIR QUALITY AND GREENHOUSE GAS ASSESSMENT

Urban Crossroads, Inc. is pleased to provide the following Air Quality and Greenhouse Gas Assessment for the Fontana Plant 20 Reservoirs Project (Project), which located at the terminus of Long View Drive City of Fontana

PROJECT OVERVIEW

It is our understanding that the Project is to consist of the installation and operation of two new 1.28-million-gallon (MG) reservoir tanks [Plant F20 Reservoirs (East) and (West)] to be used for portable water services within Fontana Water Company's (FWC) service area.

SUMMARY OF FINDINGS

Results of the assessment indicate that the Project would result in a less than significant with respect to air quality and greenhouse gases (GHGs).

PROJECT AIR QUALITY IMPACTS

AIR QUALITY SETTING

South Coast Air Basin (SCAB)

The Project site is located in the SCAB within the jurisdiction of South Coast Air Quality Management District (SCAQMD) (1). The SCAQMD was created by the 1977 Lewis-Presley Air Quality Management Act, which merged four county air pollution control bodies into one regional district. Under the Act, the SCAQMD is responsible for bringing air quality in areas under its jurisdiction into conformity with federal and state air quality standards. As previously stated, the Project site is located within the SCAB, a 6,745-square mile subregion of the SCAQMD, which includes portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County.

The SCAB is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Los Angeles County portion of the Mojave Desert Air Basin is bounded by the San Gabriel Mountains to the south and west, the Los Angeles / Kern County border to the north, and the Los Angeles / San Bernardino County border to the east. The Riverside County portion of the Salton Sea Air Basin is bounded by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley.

Regional Climate

The regional climate has a substantial influence on air quality in the SCAB. In addition, the temperature, wind, humidity, precipitation, and amount of sunshine influence the air quality.

The annual average temperatures throughout the SCAB vary from the low to middle 60s degrees Fahrenheit (°F). Due to a decreased marine influence, the eastern portion of the SCAB shows greater variability in average annual minimum and maximum temperatures. January is the coldest month throughout the SCAB, with average minimum temperatures of 47°F in downtown Los Angeles and 36°F in San Bernardino. All portions of the SCAB have recorded maximum temperatures above 100°F.

Although the climate of the SCAB can be characterized as semi-arid, the air near the land surface is quite moist on most days because of the presence of a marine layer. This shallow layer of sea air is an important modifier of SCAB climate. Humidity restricts visibility in the SCAB, and the conversion of sulfur dioxide (SO₂) to sulfates (SO₄) is heightened in air with high relative humidity. The marine layer provides an environment for that conversion process, especially during the spring and summer months. The annual average relative humidity within the SCAB is 71 percent (%) along the coast and 59% inland. Since the ocean effect is dominant, periods of heavy early morning fog are frequent and low stratus clouds are a characteristic feature. These effects decrease with distance from the coast.

More than 90% of the SCAB's rainfall occurs from November through April. The annual average rainfall varies from approximately nine inches in Riverside to fourteen inches in downtown Los Angeles. Monthly and yearly rainfall totals are extremely variable. Summer rainfall usually consists of widely scattered thunderstorms near the coast and slightly heavier shower activity in the eastern portion of the SCAB with frequency being higher near the coast.

Due to its generally clear weather, about three-quarters of available sunshine is received in the SCAB. The remaining one-quarter is absorbed by clouds. The ultraviolet portion of this abundant radiation

is a key factor in photochemical reactions. On the shortest day of the year there are approximately 10 hours of possible sunshine, and on the longest day of the year there are approximately 14½ hours of possible sunshine.

The importance of wind to air pollution is considerable. The direction and speed of the wind determines the horizontal dispersion and transport of the air pollutants. During the late autumn to early spring rainy season, the SCAB is subjected to wind flows associated with the traveling storms moving through the region from the northwest. This period also brings five to ten periods of strong, dry offshore winds, locally termed “Santa Anas” each year. During the dry season, which coincides with the months of maximum photochemical smog concentrations, the wind flow is bimodal, typified by a daytime onshore sea breeze and a nighttime offshore drainage wind. Summer wind flows are created by the pressure differences between the relatively cold ocean and the unevenly heated and cooled land surfaces that modify the general northwesterly wind circulation over southern California. Nighttime drainage begins with the radiational cooling of the mountain slopes. Heavy, cool air descends the slopes and flows through the mountain passes and canyons as it follows the lowering terrain toward the ocean. Another characteristic wind regime in the SCAB is the “Catalina Eddy,” a low level cyclonic (counterclockwise) flow centered over Santa Catalina Island which results in an offshore flow to the southwest. On most spring and summer days, some indication of an eddy is apparent in coastal sections.

In the SCAB, there are two distinct temperature inversion structures that control vertical mixing of air pollution. During the summer, warm high-pressure descending (subsiding) air is undercut by a shallow layer of cool marine air. The boundary between these two layers of air is a persistent marine subsidence/inversion. This boundary prevents vertical mixing which effectively acts as an impervious lid to pollutants over the entire SCAB. The mixing height for the inversion structure is normally situated 1,000 to 1,500 feet above mean sea level.

A second inversion-type forms in conjunction with the drainage of cool air off the surrounding mountains at night followed by the seaward drift of this pool of cool air. The top of this layer forms a sharp boundary with the warmer air aloft and creates nocturnal radiation inversions. These inversions occur primarily in the winter when nights are longer and onshore flow is weakest. They are typically only a few hundred feet above mean sea level. These inversions effectively trap pollutants, such as nitrogen oxides (NOX) and carbon monoxide (CO) from vehicles, as the pool of cool air drifts seaward. Winter is therefore a period of high levels of primary pollutants along the coastline.

Wind Patterns and Project Location

The distinctive climate of the Project area and the SCAB is determined by its terrain and geographical location. The SCAB is located in a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean in the southwest quadrant with high mountains forming the remainder of the perimeter.

Wind patterns across the south coastal region are characterized by westerly and southwesterly onshore winds during the day and easterly or northeasterly breezes at night. Winds are characteristically light although the speed is somewhat greater during the dry summer months than during the rainy winter season.

Criteria Pollutants

Both the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) have established ambient air quality standards for common pollutants. These ambient air quality standards are levels of contaminants representing safe levels that avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called “criteria” pollutants because the health and other effects of each pollutant are described in criteria documents. The six criteria pollutants are ozone (O₃) (precursor emissions include NO_x and reactive organic gases (ROG), CO, particulate matter (PM), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and lead. Areas that meet ambient air quality standards are classified as attainment areas, while areas that do not meet these standards are classified as nonattainment areas. The Riverside County portion of the SCAB is designated as a nonattainment area for the federal O₃ and PM_{2.5} standards and is also a nonattainment area for the state standards for O₃, PM₁₀, and PM_{2.5}.

REGULATORY BACKGROUND

FEDERAL REGULATIONS

The United States Environmental Protection Agency (EPA) is responsible for setting and enforcing the national ambient air quality standards (NAAQS) for ozone (O₃), carbon monoxide (CO), nitrogen oxides (NO_x), sulfur dioxide (SO₂), particulate matter 10 microns in diameter or less (PM₁₀), and lead (Pb) (2). The EPA has jurisdiction over emissions sources that are under the authority of the federal government including aircraft, locomotives, and emissions sources outside state waters (Outer Continental Shelf). The EPA also establishes emission standards for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission requirements of CARB.

The Federal Clean Air Act (CAA) was first enacted in 1955 and has been amended numerous times in subsequent years (1963, 1965, 1967, 1970, 1977, and 1990). The CAA establishes the federal air quality standards, the NAAQS, and specifies future dates for achieving compliance (3). The CAA also mandates that each state submit and implement state implementation plans (SIPs) for local areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards will be met.

The 1990 amendments to the CAA that identify specific emission reduction goals for areas not meeting the NAAQS require a demonstration of reasonable further progress toward attainment and incorporate additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA most directly applicable to the development of the Project site include Title I (Non-Attainment Provisions) and Title II (Mobile Source Provisions) (4) (5). Title I provisions were established with the goal of attaining the NAAQS for the following criteria pollutants O₃, NO₂, SO₂, PM₁₀, CO, particulate matter 2.5 microns in diameter or less (PM_{2.5}), and Pb. The NAAQS were amended in July 1997 to include an additional standard for O₃ and to adopt a NAAQS for PM_{2.5}.

Mobile source emissions are regulated in accordance with Title II provisions. These provisions require the use of cleaner burning gasoline and other cleaner burning fuels such as methanol and natural gas. Automobile manufacturers are also required to reduce tailpipe emissions of hydrocarbons and NO_x. NO_x is a collective term that includes all forms of NO_x which are emitted as byproducts of the combustion process.

CALIFORNIA REGULATIONS

CARB

The CARB, which became part of the California EPA (CalEPA) in 1991, is responsible for ensuring implementation of the California Clean Air Act (AB 2595), responding to the federal CAA, and for regulating emissions from consumer products and motor vehicles. AB 2595 mandates achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to attain the state ambient air quality standards by the earliest practical date. The CARB established the California ambient air quality standards (CAAQS) for all pollutants for which the federal government has NAAQS and, in addition, establishes standards for SO₄, visibility, hydrogen sulfide (H₂S), and vinyl chloride (C₂H₃Cl). However, at this time, H₂S and C₂H₃Cl are not measured at any monitoring stations in the SCAB because they are not considered to be a regional air quality problem. Generally, the CAAQS are more stringent than the NAAQS (6) (7).

Local air quality management districts, such as the SCAQMD, regulate air emissions from stationary sources such as commercial and industrial facilities. All air pollution control districts have been formally designated as attainment or non-attainment for each CAAQS.

Serious non-attainment areas are required to prepare Air Quality Management Plans (AQMP) that include specified emission reduction strategies in an effort to meet clean air goals. These plans are required to include:

- Application of Best Available Retrofit Control Technology to existing sources;
- Developing control programs for area sources (e.g., architectural coatings and solvents) and indirect sources (e.g. motor vehicle use generated by residential and commercial development);
- A District permitting system designed to allow no net increase in emissions from any new or modified permitted sources of emissions;
- Implementing reasonably available transportation control measures and assuring a substantial reduction in growth rate of vehicle trips and miles traveled;
- Significant use of low emissions vehicles by fleet operators;
- Sufficient control strategies to achieve a 5% or more annual reduction in emissions or 15% or more in a period of three years for ROG_s, NO_x, CO and PM₁₀. However, air basins may use alternative emission reduction strategy that achieves a reduction of less than 5% per year under certain circumstances.

AQMP

Currently, the NAAQS and CAAQS are exceeded in most parts of the SCAB. In response, the SCAQMD has adopted a series of AQMP to meet the state and federal ambient air quality standards (8). AQMPs are updated regularly to ensure an effective reduction in emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy.

APPLICABLE REGULATORY REQUIREMENTS

SCAQMD Rules that are currently applicable during construction activity for this Project include but are not limited to Rule 403 (Fugitive Dust) and Rule 1113 (Architectural Coatings) (9) (10).

SCAQMD RULE 403

This rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent and reduce fugitive dust emissions. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust and requires best available control measures to be applied to earth moving and grading activities.

Any operation or activity that might cause the emission of any smoke, fly ash, dust, fumes, vapors, gases, or other forms of air pollution, which can cause damage to human health, vegetation, or other forms of property, or can cause excessive soiling on any other parcel, shall conform to the requirements of the SCAQMD (11).

SCAQMD RULE 1113

This rule serves to limit the volatile organic compounds (VOC) content of architectural coatings used on projects in the SCAQMD. This rule applies to any person who supplies, sells, offers for sale, or manufactures any architectural coating for use on projects (12).

METHODOLOGY

The California Air Pollution Control Officers Association (CAPCOA) in conjunction with other California air districts, including SCAQMD, released CalEEMod 2022 in May 2022. CalEEMod periodically releases updates, as such the latest version available at the time of this report has been utilized in this analysis. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (VOCs, NO_x, SO_x, CO, PM₁₀, and PM_{2.5}) and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures (13). Accordingly, the latest version of CalEEMod has been used for this Project to determine construction and operational air quality and GHG emissions.

STANDARDS OF SIGNIFICANCE

The criteria used to determine the significance of potential Project-related air quality impacts are taken from the California Environmental Quality Act Guidelines (*CEQA Guidelines*) (14 CCR §§15000, et seq.). Based on these thresholds, a project would result in a significant impact related to air quality if it would (14):

- Threshold 1: Conflict with or obstruct implementation of the applicable air quality plan.
- Threshold 2: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard.
- Threshold 3: Expose sensitive receptors to substantial pollutant concentrations.
- Threshold 4: Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

AIR QUALITY REGIONAL EMISSIONS THRESHOLDS

The SCAQMD has developed regional significance thresholds for criteria pollutants, as summarized at Table 1 (15). The SCAQMD's CEQA Air Quality Significance Thresholds (March 2023) indicate that

any projects in the SCAB with daily emissions that exceed any of the indicated thresholds should be considered as having an individually and cumulatively significant air quality impact.

TABLE 1: MAXIMUM REGIONAL DAILY EMISSIONS THRESHOLDS

Pollutant	Construction	Operations
NO _x	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM ₁₀	150 lbs/day	150 lbs/day
PM _{2.5}	55 lbs/day	55 lbs/day
SO _x	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Pb	3 lbs/day	3 lbs/day

lbs/day = Pounds Per Day

LOCALIZED EMISSIONS SIGNIFICANCE THRESHOLDS

The analysis follows the methodology outlined the SCAQMD *Final Localized Significance Threshold (LST) Methodology* (LST Methodology). According to this methodology, the staff recommendation is to apply the LST mass rate lookup tables exclusively for projects that are less than or equal to five acres. The project specific thresholds used to assess localized air quality emission impacts, along with the rationale for their determination, are detailed in later in this memo.

CONSTRUCTION ACTIVITIES

Construction activities associated with the Project would result in emissions of VOCs, NO_x, SO_x, CO, PM₁₀, and PM_{2.5}. Construction related emissions are expected from the following construction activities:

- Site Preparation
- Grading (Import/Export)
- Infrastructure and Tank Installation
- Paving
- Architectural Coating

CONSTRUCTION-RELATED DUST EMISSIONS

Dust is typically a major concern during demolition and grading activities. Because such emissions are not amenable to collection and discharge through a controlled source, they are called “fugitive emissions.” Fugitive dust emissions rates vary as a function of many parameters (soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.). CalEEMod was utilized to calculate fugitive dust emissions resulting from these phases of activity.

Grading Activities

Grading quantities were conservatively assumed using provided pipeline measurements and as such, it is anticipated that approximately 8,000 CY of import is needed.

On-Road Trips

Construction generates on-road vehicle emissions from vehicle usage for workers and vendors commuting to and from the site. Information on the anticipated number of workers on-site was provided and modeled accordingly as shown on Table 2.

TABLE 2: TRIPS AND VMT

Construction Activity	Worker Trips Per Day	Vendor Trips Per Day	Hauling Trips Per Day
Site Preparation	5	0	0
Grading	8	0	23
Infrastructure and Tank Installation	0	0	0
Paving	18	0	0
Architectural Coating	0	0	0

CONSTRUCTION DURATION

For purposes of analysis, construction of the Project is expected to commence in February 2026 and would last through July 2027. The construction schedule utilized in the analysis represents a “worst-case” analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent¹. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per *CEQA Guidelines* (16).

TABLE 3: CONSTRUCTION ACTIVITIES

Construction Activity	Start Date	End Date	Days
Site Preparation	2/2/2026	3/2/2026	21
Grading	3/3/2026	4/30/2026	43
Infrastructure and Tank Installation	5/1/2026	2/2/2027	198
Paving	2/3/2027	3/31/2027	41
Architectural Coating	4/1/2027	7/1/2027	66

¹ As shown in the CalEEMod User’s Guide Version 2022, Appendix G “Table G-11. Statewide Average Annual Offroad Equipment Emission Factors” as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

CONSTRUCTION EQUIPMENT

Associated equipment was based on information provided by the Project Description. A detailed summary of construction equipment is provided on Table 4.

TABLE 4: CONSTRUCTION EQUIPMENT

Construction Activity	Equipment/Info	Quantity
Site Preparation	Graders	1
	Tractors/Loaders/Backhoes	1
Grading	Graders	1
	Rubber Tired Dozers	1
	Tractors/Loaders/Backhoes	1
Infrastructure and Tank Installation	Cranes	1
	Forklifts	2
	Tractors/Loaders/Backhoes	2
	Excavators	1
	Off-Highway Trucks	1
Paving	Tractors/Loaders/Backhoes	1
	Cement and Mortar Mixers	4
	Pavers	1
	Rollers	1
Architectural Coating	Air Compressors	1

REGIONAL CONSTRUCTION EMISSIONS SUMMARY

The estimated maximum daily construction emissions without mitigation are summarized in Table 5. Under the assumed scenarios, emissions resulting from the Project construction at either site would not exceed thresholds established by the SCAQMD for emissions of any criteria pollutant. Project construction-source emissions impacts would therefore be less-than-significant. Detailed construction model outputs are presented in Appendix 1.

TABLE 5: OVERALL REGIONAL CONSTRUCTION EMISSIONS SUMMARY

Year	Emissions (lbs/day)					
	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Summer						
2026	1.08	11.08	11.29	0.03	2.35	1.22
2027	0.29	0.83	1.13	0.00	0.02	0.02
Winter						
2026	1.08	11.16	11.17	0.03	2.35	1.22
2027	0.74	6.18	8.89	0.02	0.40	0.21
Maximum Daily Emissions	1.08	11.16	11.29	0.03	2.35	1.22
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

REGIONAL OPERATIONAL EMISSIONS SUMMARY

Operational activities associated with Projects would result in emissions of CO, VOCs, NO_x, SO_x, PM₁₀, and PM_{2.5}. Operational related emissions are from the following primary sources: area source emissions, energy source emissions, and mobile source emissions.

The proposed Project includes the installation and operation of two new 1.28-million-gallon (MG) reservoir tanks [Plant F20 Reservoirs (East) and (West)] to be used for portable water services within Fontana Water Company's (FWC) service area, which does not include any of the primary sources discussed previously. Additionally, implementation of the proposed project would improve the FWC service regarding to existing water demands for domestic uses, fire suppression, and emergency needs. The project would serve existing and planned future development and would not generate growth. Furthermore, no stationary sources are proposed and the ongoing inspections and maintenance for the proposed project would generate minimal vehicle trips. Therefore, there are no quantifiable operational emissions associated with the proposed Project and no further analysis is required.

LOCALIZED AIR QUALITY IMPACTS

BACKGROUND ON LST DEVELOPMENT

The SCAQMD has established that impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the federal and/or state ambient air quality standards (NAAQS/CAAQS). Collectively, these are referred to as Localized Significance Thresholds (LSTs).

The SCAQMD established LSTs in response to the SCAQMD Governing Board's Environmental Justice Initiative I-4². LSTs represent the maximum emissions from a project that would not cause or

² The purpose of SCAQMD's Environmental Justice program is to ensure that everyone has the right to equal protection from air pollution and fair access to the decision-making process that works to improve the quality of air within their communities. Further, the SCAQMD defines Environmental Justice as "...equitable environmental policymaking and enforcement to protect the health of all residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location, from the health effects of air pollution."

contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest residence or sensitive receptor. The SCAQMD states that lead agencies can use the LSTs as another indicator of significance in its air quality impact analyses.

LSTs were developed in response to environmental justice and health concerns raised by the public regarding exposure of individuals to criteria pollutants in local communities. To address the issue of localized significance, the SCAQMD adopted LSTs that show whether a project would cause or contribute to localized air quality impacts and thereby cause or contribute to potential localized adverse health effects. The analysis makes use of methodology included in the *LST Methodology* (17).

EMISSIONS CONSIDERED

Based on SCAQMD's *LST Methodology*, emissions for concern during construction activities are on-site NO_x, CO, PM_{2.5}, and PM₁₀. The *LST Methodology* clearly states that "off-site mobile emissions from the Project should not be included in the emissions compared to LSTs (18)." As such, for purposes of the construction LST analysis, only emissions included in the CalEEMod "on-site" emissions outputs were considered.

MAXIMUM DAILY DISTURBED-ACREAGE

The "acres disturbed" for analytical purposes are based on specific equipment type for each subcategory of construction activity and the estimated maximum area a given piece of equipment can pass over in an 8-hour workday (as shown on Table 7). The equipment-specific grading rates are summarized in the SCAQMD's *Fact Sheet for Applying CalEEMod to Localized Significance Thresholds* and CalEEMod User's Guide *Appendix A: Calculation Details for CalEEMod* (19) (20). The disturbed area per day is representative of a piece of equipment making multiple passes over the same land area. In other words, one Rubber Tired Dozer can make multiple passes over the same land area totaling 0.5 acres in a given 8-hour day. The Project's construction activities could disturb a maximum of approximately 1.5 acre per day.

LOCALIZED THRESHOLDS FOR CONSTRUCTION ACTIVITY

Since the total acreage disturbed is less than five acres per day for construction activities, the SCAQMD's screening look-up tables are utilized in determining impacts. It should be noted that since the look-up tables identifies thresholds at only 1 acre, 2 acres, and 5 acres, linear regression has been utilized to determine localized significance thresholds. Consistent with SCAQMD guidance, the thresholds presented in Table 6 were calculated by interpolating the threshold values for the Project's disturbed acreage.

TABLE 6: MAXIMUM DAILY LOCALIZED CONSTRUCTION EMISSIONS THRESHOLDS

Construction Activity	Pollutant			
	NO _x	CO	PM ₁₀	PM _{2.5}
All Construction Activity	342 lbs/day	3,737 lbs/day	85 lbs/day	17 lbs/day

Source: Localized Thresholds presented in this table are based on the SCAQMD Final LST Methodology

RECEPTORS

The analysis makes use of methodology included in the SCAQMD *Final Localized Significance Threshold Methodology* (LST Methodology) (21). The SCAQMD has established that impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the federal and/or state ambient air quality standards (NAAQS/CAAQS). Collectively, these are referred to as Localized Significance Thresholds (LSTs). The SCAQMD established LSTs in response to the SCAQMD Governing Board's Environmental Justice Initiative I-4³. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the sensitive receptor. The SCAQMD states that lead agencies can use the LSTs as another indicator of significance in its air quality impact analyses.

The SCAQMD recommends that the nearest sensitive receptor be considered when determining the Project's potential to cause an individual or cumulatively significant impact. The nearest land use where an individual could remain for 24 hours to the Project site has been used to determine localized construction and operational air quality impacts for emissions of PM₁₀ and PM_{2.5} (since PM₁₀ and PM_{2.5} thresholds are based on a 24-hour averaging time). The nearest receptor used for evaluation of localized impacts of PM₁₀ and PM_{2.5} is location R2, represented by the existing residence at 15321 Daybreak Ln, approximately 624 feet (190 meters) east of the Project site.

As previously stated, and consistent with LST Methodology, the nearest industrial/commercial use to the Project site is used to determine construction and operational LST air impacts for emissions of NO_x and CO as the averaging periods for these pollutants are shorter (8 hours or less) and it is reasonable to assume that an individual could be present at these sites for periods of one to 8 hours. It should be noted that the existing residence (R2) is located at a closer distance than the nearest industrial/commercial use. As such, the same receptor will be used for evaluation of localized NO_x and CO. Receptors in the Project study area shown on Exhibit 2.

Project-related Receptors

Receptors in the Project study area are described below and shown in Exhibit 2. Localized air quality impacts were evaluated at sensitive receptor land uses nearest the Project site. All distances are

³ The purpose of SCAQMD's Environmental Justice program is to ensure that everyone has the right to equal protection from air pollution and fair access to the decision-making process that works to improve the quality of air within their communities. Further, the SCAQMD defines Environmental Justice as "...equitable environmental policymaking and enforcement to protect the health of all residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location, from the health effects of air pollution."

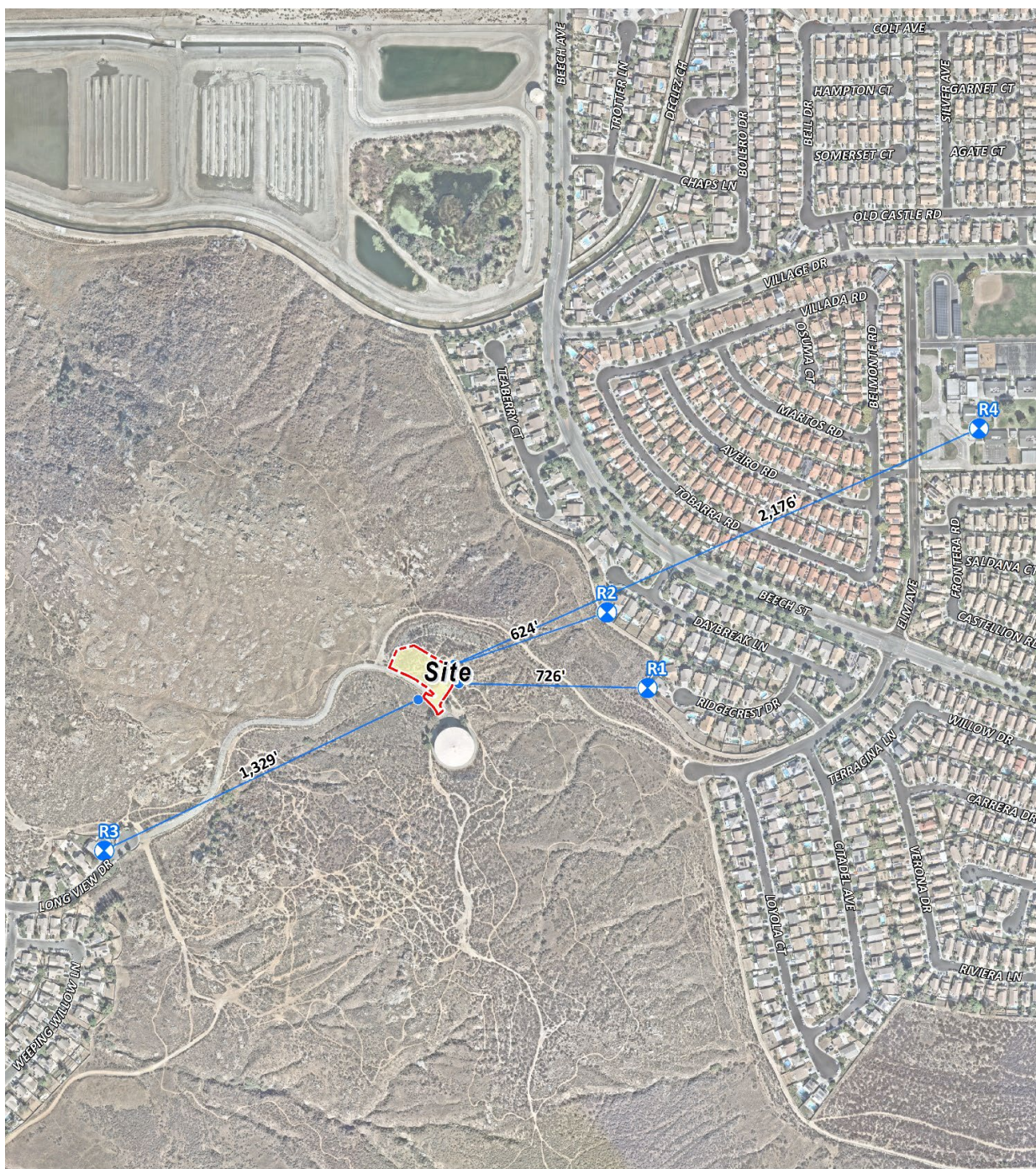
measured from the Project site boundary to the outdoor living areas (e.g., backyards) or at the building façade, whichever is closer to the Project site.

- R1: Location R1 represents the existing residence located at 15377 Ridgecrest Dr, approximately 726 feet east of the Project site. Receptor R1 is placed at the building façade facing the Project site.
- R2: Location R2 represents the existing residence located at 15321 Daybreak Ln, approximately 624 feet east of the Project site. Receptor R2 is placed at the building façade facing the Project site.
- R3: Location R3 represents the existing residence located at 15024 Long View Dr, approximately 1,329 feet west of the Project site. Receptor R3 is placed at the building façade facing the Project site.
- R4: Location R4 represents the Michael D'Arcy Elementary located at 11645 Elm Ave, approximately 2,176 feet east of the Project site. Receptor R4 is placed at the building façade facing the Project site.

The SCAQMD recommends that the nearest sensitive receptor be considered when determining a Project's impact. The nearest land use where an individual could remain for 24 hours to the Project site has been used to determine localized construction and operational air quality impacts for emissions of PM_{10} and $PM_{2.5}$ (since PM_{10} and $PM_{2.5}$ thresholds are based on a 24-hour averaging time).

As previously stated, and consistent with LST Methodology, the nearest industrial/commercial use to the Project site is used to determine construction and operational LST air impacts for emissions of NO_x and CO as the averaging periods for these pollutants are shorter (8 hours or less) and it is reasonable to assumed that an individual could be present at these sites for periods of one to 8 hours.

EXHIBIT 1: RECEPTOR MAP



LEGEND:

Site Boundary

Receptor Locations

Distance from receptor to Project site boundary (in feet)

CONSTRUCTION-SOURCE LOCALIZED EMISSIONS

Emissions during the peak construction activity will not exceed the SCAQMD's localized significance thresholds at the maximally exposed receptor location, as illustrated in Table 7. All other modeled locations in the study area would experience lower concentrations, resulting in a reduced impact. As such, the Project's localized impacts during construction activity would be less than significant. Outputs from the model runs for construction LSTs are provided in Appendix 1.

TABLE 7: CONSTRUCTION LOCALIZED SIGNIFICANCE SUMMARY

Construction Activity	Year	NO _x	CO	PM ₁₀	PM _{2.5}
Site Preparation	2026	3.74	5.54	0.32	0.19
	Maximum Daily Emissions	3.74	5.54	0.32	0.19
	SCAQMD Regional Thresholds	342	3,737	85	17
	Threshold Exceeded?	NO	NO	NO	NO
Grading	2026	9.19	9.69	1.80	1.05
	Maximum Daily Emissions	9.19	9.69	1.80	1.05
	SCAQMD Regional Thresholds	342	3,737	85	17
	Threshold Exceeded?	NO	NO	NO	NO
Infrastructure and Tank Installation	2026	6.49	8.90	0.25	0.23
	2027	6.18	8.89	0.22	0.20
	Maximum Daily Emissions	6.49	8.90	0.25	0.23
	SCAQMD Regional Thresholds	342	3,737	85	17
Paving	2027	4.15	5.31	0.17	0.15
	Maximum Daily Emissions	4.15	5.31	0.17	0.15
	SCAQMD Regional Thresholds	342	3,737	85	17
	Threshold Exceeded?	NO	NO	NO	NO
Architectural Coating	2027	0.83	1.13	0.02	0.02
	Maximum Daily Emissions	0.83	1.13	0.02	0.02
	SCAQMD Regional Thresholds	342	3,737	85	17
	Threshold Exceeded?	NO	NO	NO	NO

OPERATIONAL-SOURCE LOCALIZED EMISSIONS

According to SCAQMD localized significance threshold methodology, LSTs would apply to the operational phase of a proposed project if the project includes stationary sources or attracts mobile sources that may spend extended periods queuing and idling at the site (e.g., warehouse or transfer facilities). The Project would generate a nominal number of traffic trips in the context of on-going maintenance resulting in a negligible amount of new mobile source emissions. Therefore, the Project

would not expose sensitive receptors to substantial pollutant concentrations and impacts would be less than significant.

AQMP

The Project site is located within the SCAB, which is characterized by relatively poor air quality. The SCAQMD has jurisdiction over an approximately 10,743 square-mile area consisting of the four-county Basin and the Los Angeles County and Riverside County portions of what use to be referred to as the Southeast Desert Air Basin. In these areas, the SCAQMD is principally responsible for air pollution control, and works directly with the SCAG, county transportation commissions, local governments, as well as state and federal agencies to reduce emissions from stationary, mobile, and indirect sources to meet state and federal ambient air quality standards. Currently, these state and federal air quality standards are exceeded in most parts of the SCAB. In response, the SCAQMD has adopted a series of AQMPs to meet the state and federal ambient air quality standards. AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy.

In December 2022, the SCAQMD released the *Final 2022 AQMP (2022 AQMP)*. The *2022 AQMP* continues to evaluate current integrated strategies and control measures to meet the NAAQS, as well as explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, state, and local levels (22). Similar to the 2016 AQMP, the *2022 AQMP* incorporates scientific and technological information and planning assumptions, including the *2020-2045 RTP/SCS*, a planning document that supports the integration of land use and transportation to help the region meet the federal CAA requirements (23). The Project's consistency with the AQMP will be determined using the *2022 AQMP* as discussed below.

It should be noted that although SCAG has released an updated 2024-2050 RTP, the 2022 AQMP is based on the 2020-2045 RTP. Criteria for determining consistency with the AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the *1993 CEQA Handbook* (24). These indicators are discussed below:

CONSISTENCY CRITERION No. 1

Potential to result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

The violations that Consistency Criterion No. 1 refer to are the CAAQS and NAAQS. CAAQS and NAAQS violations would occur if regional or localized significance thresholds were exceeded.

Construction Impacts – Consistency Criterion 1

As evaluated, the Project's regional and localized construction-source emissions would not exceed applicable regional significance threshold and LST thresholds. As such, a less than significant impact is expected.

Operational Impacts – Consistency Criterion 1

As evaluated, the Project's regional and localized operation-source emissions would not exceed applicable regional significance threshold and LST thresholds. As such, a less than significant impact is expected.

On the basis of the preceding discussion, the Project is determined to be consistent with the first criterion.

CONSISTENCY CRITERION No. 2

Potential to exceed the assumptions in the AQMP based on the years of Project build-out phase.

The 2022 AQMP demonstrates that the applicable ambient air quality standards can be achieved within the timeframes required under federal law. Growth projections from local general plans adopted by cities in the district are provided to the SCAG, which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP. Development consistent with the growth projections in City of Fontana is considered to be consistent with the AQMP.

Construction Impacts – Consistency Criterion 2

Peak day emissions generated by construction activities are largely independent of land use assignments, but rather are a function of development scope and maximum area of disturbance. Irrespective of the site's land use designation, development of the site to its maximum potential would likely occur, with disturbance of the entire site occurring during construction activities. As such, when considering that no emissions thresholds will be exceeded, a less than significant impact would result.

Operational Impacts – Consistency Criterion 2

Since the Project's proposed land uses are consistent with the City of Fontana and as the Project's construction and operational-source air pollutant emissions would not exceed the regional or localized significance thresholds, the Project is determined to be consistent with the second criterion.

On the basis of the preceding discussion, the Project is determined to be consistent with the second criterion.

AQMP CONSISTENCY CONCLUSION

The proposed Project includes the installation and operation of two new 1.28-million-gallon (MG) reservoir tanks [Plant F20 Reservoirs (East) and (West)] to be used for portable water services within Fontana Water Company's (FWC) service area. The Project is therefore considered to be consistent with the AQMP.

CONSISTENCY CRITERION No. 3

Potential Impact to Sensitive Receptors

The potential impact of Project-generated air pollutant emissions at sensitive receptors has also been considered. Results of the LST analysis indicate that the Project would not exceed the SCAQMD localized significance thresholds during construction. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations during Project construction.

Additionally, the Project would not exceed the SCAQMD localized significance thresholds during operational activity. Further Project traffic would not create or result in a CO “hotspot.” Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations as the result of Project operations.

CONSISTENCY CRITERION No. 4

Odors

The potential for the Project to generate objectionable odors has also been considered. Land uses generally associated with odor complaints include:

- Agricultural uses (livestock and farming)
- Wastewater treatment plants
- Food processing plants
- Chemical plants
- Composting operations
- Refineries
- Landfills
- Dairies
- Fiberglass molding facilities

The Project would have potential land uses associated with emitting objectionable odors. Potential odor sources associated with the proposed Project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities. As shown in Table 6, construction would not result in significant emissions of SO_x. Furthermore, construction would be temporary, and equipment would not be located in a single location throughout the duration of construction. Odorous hydrocarbons tend to dissipate quickly and would only affect receptors in the immediate vicinity, rather than a substantial number of people at any given time. Therefore, construction activities would not result in other emissions, such as odors, adversely affecting a substantial number of people, and impacts would be less than significant.

Operation of the project would not result in odor impacts because none of the project components include odor-generating components, as the reservoir tanks are enclosed. The proposed Project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Thus, no odor emissions would occur and impacts would be less than significant. Therefore, odors associated with the proposed project construction and operations would be less than significant and no mitigation is required (25).

PROJECT GHG ANALYSIS

CLIMATE CHANGE SETTING

Global climate change (GCC) is the change in average meteorological conditions on the earth with respect to temperature, precipitation, and storms. The majority of scientists believe that the climate shift taking place since the Industrial Revolution is occurring at a quicker rate and magnitude than in the past. Scientific evidence suggests that GCC is the result of increased concentrations of GHGs in the earth’s atmosphere, including carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and

fluorinated gases. The majority of scientists believe that this increased rate of climate change is the result of GHGs resulting from human activity and industrialization over the past 200 years.

An individual project like the proposed Project evaluated in this memo cannot generate enough GHG emissions to affect a discernible change in global climate. However, the proposed Project may participate in the potential for GCC by its incremental contribution of GHGs combined with the cumulative increase of all other sources of GHGs, which when taken together constitute potential influences on GCC. Because these changes may have serious environmental consequences, this memo will evaluate the potential for the proposed Project to have a significant effect upon the environment as a result of its potential contribution to the greenhouse effect.

GCC refers to the change in average meteorological conditions on the earth with respect to temperature, wind patterns, precipitation and storms. Global temperatures are regulated by naturally occurring atmospheric gases such as water vapor, CO₂, N₂O, CH₄, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). These particular gases are important due to their residence time (duration they stay) in the atmosphere, which ranges from 10 years to more than 100 years. These gases allow solar radiation into the earth's atmosphere, but prevent radiative heat from escaping, thus warming the earth's atmosphere. GCC can occur naturally as it has in the past with the previous ice ages.

Gases that trap heat in the atmosphere are often referred to as GHGs. GHGs are released into the atmosphere by both natural and anthropogenic activity. Without the natural GHG effect, the earth's average temperature would be approximately 61 degrees Fahrenheit (°F) cooler than it is currently. The cumulative accumulation of these gases in the earth's atmosphere is considered to be the cause for the observed increase in the earth's temperature.

For the purposes of this analysis, emissions of CO₂, CH₄, and N₂O were evaluated because these gases are the primary contributors to GCC from development projects. Although there are other substances such as fluorinated gases that also contribute to GCC, these fluorinated gases were not evaluated as their sources are not well-defined and do not contain accepted emissions factors or methodology to accurately calculate these gases.

REGULATORY SETTING

Executive Order S-3-05

Former California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05, the following reduction targets for GHG emissions:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80% below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

Assembly Bill (AB) 32

The California State Legislature enacted AB 32, which requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. "GHGs" as defined under AB 32 include CO₂, CH₄, N₂O,

hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). Since AB 32 was enacted, a seventh chemical, nitrogen trifluoride, has also been added to the list of GHGs. CARB is the state agency charged with monitoring and regulating sources of GHGs. Pursuant to AB 32, CARB adopted regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 states the following:

“Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.”

CARB approved the 1990 GHG emissions level of 427 million metric ton of CO₂ equivalent per year (MMTCO₂e) on December 6, 2007 (26). Therefore, emissions generated in California in 2020 are required to be equal to or less than 427 MMTCO₂e. Emissions in 2020 in a “business as usual” (BAU) scenario were estimated to be 596 MMTCO₂e, which do not account for reductions from AB 32 regulations (27). At that level, a 28.4% reduction was required to achieve the 427 MMTCO₂e 1990 inventory. In October 2010, CARB prepared an updated BAU 2020 forecast to account for the recession and slower forecasted growth. The forecasted inventory without the benefits of adopted regulation is now estimated at 545 MMTCO₂e. Therefore, under the updated forecast, a 21.7% reduction from BAU is required to achieve 1990 levels (28).

Progress in Achieving AB 32 Targets and Remaining Reductions Required

The State has made steady progress in implementing AB 32 and achieving targets included in Executive Order S-3-05. The progress is shown in updated emission inventories prepared by CARB for 2000 through 2012 (29). The State has achieved the Executive Order S-3-05 target for 2010 of reducing GHG emissions to 2000 levels. As shown below, the 2010 emission inventory achieved this target.

- 1990: 427 MMTCO₂e (AB 32 2020 target)
- 2000: 463 MMTCO₂e (an average 8% reduction needed to achieve 1990 base)
- 2010: 450 MMTCO₂e (an average 5% reduction needed to achieve 1990 base)

CARB has also made substantial progress in achieving its goal of achieving 1990 emissions levels by 2020. As described earlier in this section, CARB revised the 2020 BAU inventory forecast to account for new lower growth projections, which resulted in a new lower reduction from BAU to achieve the 1990 base. The previous reduction from 2020 BAU needed to achieve 1990 levels was 28.4% and the latest reduction from 2020 BAU is 21.7%.

- 2020: 545 MMTCO₂e BAU (an average 21.7% reduction from BAU needed to achieve 1990 base)

Senate Bill (SB) 32

On September 8, 2016, Governor Jerry Brown signed the SB 32 and its companion bill, AB 197. SB 32 requires the state to reduce statewide GHG emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15. The new legislation builds upon the AB 32 goal of 1990 levels by 2020 and provides an intermediate goal to achieving S-3-05, which sets a

statewide GHG reduction target of 80% below 1990 levels by 2050. AB 197 creates a legislative committee to oversee regulators to ensure that CARB not only responds to the Governor, but also the Legislature (30).

AB 197

A condition of approval for SB 32 was the passage of AB 197. AB 197 requires that CARB consider the social costs of GHG emissions and prioritize direct reductions in GHG emissions at mobile sources and large stationary sources. AB 197 also gives the California legislature more oversight over CARB through the addition of two legislatively appointed members to the CARB Board and the establishment a legislative committee to make recommendations about CARB programs to the legislature.

Executive Order B-55-18 and SB 100

Executive Order B-55-18 and SB 100. SB 100 and Executive Order B-55-18 were signed by Governor Brown on September 10, 2018. Under the existing RPS, 25% of retail sales are required to be from renewable sources by December 31, 2016, 33% by December 31, 2020, 40% by December 31, 2024, 45% by December 31, 2027, and 50% by December 31, 2030. SB 100 raises California's RPS requirement to 50% renewable resources target by December 31, 2026, and to achieve a 60% target by December 31, 2030. SB 100 also requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours of those products sold to their retail end-use customers achieve 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. In addition to targets under AB 32 and SB 32, Executive Order B-55-18 establishes a carbon neutrality goal for the state of California by 2045; and sets a goal to maintain net negative emissions thereafter. The Executive Order directs the California Natural Resources Agency (CNRA), California Environmental Protection Agency (CalEPA), the Department of Food and Agriculture (CDFA), and CARB to include sequestration targets in the Natural and Working Lands Climate Change Implementation Plan consistent with the carbon neutrality goal.

Title 24 California Code of Regulations (CCR)

California Code of Regulations (CCR) Title 24 Part 6: The California Energy Code was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption.

The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. CCR, Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, industrial, commercial, and school buildings that went in effect on August 1, 2009, and is administered by the California Building Standards Commission.

CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2022 California Green Building Code Standards that became effective on January 1, 2023⁴. As

⁴ The 2022 California Green Building Standard Code became effective on January 1, 2023, however; it has since been amended on July 1, 2024 with the Intervening Code Cycle Update which is reflected in this report. Additionally, it should be noted that

construction of the Project is anticipated to be completed in 2042, the Project would be required to comply with the Title 24 standards in place at that time.

PROJECT GHG IMPACTS

STANDARDS OF SIGNIFICANCE

According to the CEQA Guidelines Appendix G thresholds, to determine whether impacts from GHG emissions are significant. Would the project:

- Threshold 1: Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
- Threshold 2: Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

The evaluation of an impact under CEQA requires measuring data from a project against both existing conditions and a “threshold of significance.” For establishing significance thresholds, the Office of Planning and Research’s amendments to the CEQA Guidelines Section 15064.7(c) state “[w]hen adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence.”

CEQA Guidelines Section 15064.4(a) further states, “. . . A lead agency shall have discretion to determine, in the context of a particular project, whether to: (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use . . .; or (2) Rely on a qualitative analysis or performance-based standards.”

CEQA Guidelines Section 15064.4 provides that a lead agency should consider the following factors, among others, 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 reduce or mitigate the project’s incremental contribution of GHG emissions. In determining the significance of impacts, the lead agency may consider a project’s consistency with the State’s long-term climate goals or strategies, provided that substantial evidence supports the agency’s analysis of how those goals or strategies address the project’s incremental contribution to climate change and its conclusion that the project’s incremental contribution is not cumulatively considerable.

CALGreen is currently being updated, with the most recent draft update consisting of the 2025 California Green Building Code Standards that will be effective on January 1, 2025. As construction of the Project is anticipated to be completed in 2042, it is presumed that the Project would be required to comply with the Title 24 standards in place at that time.

DISCUSSION ON ESTABLISHMENT OF SIGNIFICANCE THRESHOLDS

The City of Fontana has not adopted its own numeric threshold of significance for determining impacts with respect to GHG emissions. A screening threshold of 3,000 MTCO₂e/yr to determine if additional analysis is required is an acceptable approach. This approach is a widely accepted screening threshold used by numerous cities and counties in the SCAB and is based on the SCAQMD staff's proposed GHG screening threshold for stationary source emissions for non-industrial projects, as described in the SCAQMD's *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans* (SCAQMD Interim GHG Threshold). The SCAQMD Interim GHG Threshold identifies a screening threshold to determine whether additional analysis is required (31).

GHG IMPACTS – CONSISTENCY WITH THRESHOLD NO. 1

Would the Project have the potential to generate direct or indirect GHG emissions that would result in a significant impact on the environment?

The estimated GHG emissions for Project are summarized in Table 8. As shown in Table 8, the Project would generate a total of approximately 9.49 MTCO₂e/yr, which would not exceed the screening threshold of 3,000 MTCO₂e/yr. This would be considered a less than significant impact. Detailed construction model outputs are presented in Appendix 1.

TABLE 8: TOTAL PROJECT GHG EMISSIONS

Source	Emissions (MT/yr)				
	CO ₂ T	CH ₄	N ₂ O	R	Total CO ₂ E
Annual construction emissions amortized over 30 years	9.41	4.37E-04	2.39E-04	1.23E-03	9.49
Total CO ₂ E (All Sources)	9.49				
Screening Threshold (CO ₂ E)	3,000				
Threshold Exceeded?	NO				

GHG IMPACTS – CONSISTENCY WITH THRESHOLD NO. 2

Would the Project have the potential to conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs?

The City of Fontana has not adopted its own numeric threshold of significance for determining impacts with respect to GHG emissions. A screening threshold of 3,000 MTCO₂e/yr to determine if additional analysis is required is an acceptable approach. This approach is a widely accepted screening threshold used by numerous cities and counties in the SCAB and is based on the SCAQMD staff's proposed GHG screening threshold for stationary source emissions for non-industrial projects, as described in the SCAQMD's *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans* (SCAQMD Interim GHG Threshold). The SCAQMD Interim GHG Threshold identifies a screening threshold to determine whether additional analysis is required (31).

The Project will result in approximately 9.49 MTCO₂e/yr from construction activities. As such, the Project would not exceed the SCAQMD's recommended numeric threshold of 3,000 MTCO₂e/yr if it

were applied. Thus, the Project would not result in a cumulatively considerable impact with respect to GHG emissions.

2022 SCOPING PLAN CONSISTENCY

The Project would not impede the State's progress towards carbon neutrality by 2045 under the 2022 Scoping Plan. The Project would be required to comply with applicable current and future regulatory requirements promulgated through the 2022 Scoping Plan. As such, the Project would be consistent with the 2022 Scoping Plan.

As discussed above, the Project involves construction activity and does not propose a trip-generating land use or facilities that would generate any substantive amount of on-going GHG emissions. As presented in Table 8, the Project's GHG emissions are below the 3,000 MTCO₂e/yr threshold. As concluded in Impact Statement GHG-1 the proposed project would not have the potential to generate a significant amount of GHGs emissions. As such, the proposed Project will not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Impacts are considered less than significant in this regard.

CONCLUSION

In summary, the results of the assessment indicate that the Project would result in a less than significant with respect to air quality and GHGs. If you have any questions, please contact me directly at hqureshi@urbanxroads.com.

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APPENDIX 1:

CALEEMOD OUTPUT FILES

16872 - Fontana Plant 20 Reservoirs Detailed Report

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1.1. Basic Project Information

Data Field	Value						
Project Name	16872 - Fontana Plant 20 Reservoirs						
Construction Start Date	2/2/2026						
Operational Year	2027						
Lead Agency	—						
Land Use Scale	Project/site						
Analysis Level for Defaults	County						
Windspeed (m/s)	2.8						
Precipitation (days)	6.8						
Location	34.038872, -117.473027						
County	San Bernardino-South Coast						
City	Fontana						
Air District	South Coast AQMD						
Air Basin	South Coast						
TAZ	5313						
EDFZ	10						
Electric Utility	Southern California Edison						
Gas Utility	Southern California Gas						
App Version	2022.1.1.33						

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Other Asphalt Surfaces	0.98	Acre	0.98	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.4	1.1	11	11	0.03	0.44	1.9	2.4	0.41	0.81	1.2	—	3,397	3,397	0.23	0.27	3.6	3,486
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.4	1.1	11	11	0.03	0.44	1.9	2.4	0.41	0.81	1.2	—	3,389	3,389	0.23	0.27	0.09	3,475
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.64	0.52	4.6	5.9	0.01	0.18	0.24	0.42	0.17	0.10	0.26	—	1,431	1,431	0.07	0.04	0.19	1,445
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.12	0.09	0.85	1.1	< 0.005	0.03	0.04	0.08	0.03	0.02	0.05	—	237	237	0.01	0.01	0.03	239

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.4	1.1	11	11	0.03	0.44	1.9	2.4	0.41	0.81	1.2	—	3,397	3,397	0.23	0.27	3.6	3,486

2027	0.32	0.29	0.83	1.1	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	—	134	134	0.01	< 0.005	0.00	134
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.4	1.1	11	11	0.03	0.44	1.9	2.4	0.41	0.81	1.2	—	3,389	3,389	0.23	0.27	0.09	3,475
2027	0.89	0.74	6.2	8.9	0.02	0.22	0.23	0.40	0.20	0.05	0.21	—	2,042	2,042	0.08	0.02	0.02	2,049
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.64	0.52	4.6	5.9	0.01	0.18	0.24	0.42	0.17	0.10	0.26	—	1,431	1,431	0.07	0.04	0.19	1,445
2027	0.19	0.17	1.0	1.5	< 0.005	0.04	0.03	0.06	0.03	0.01	0.04	—	273	273	0.01	< 0.005	0.04	274
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.12	0.09	0.85	1.1	< 0.005	0.03	0.04	0.08	0.03	0.02	0.05	—	237	237	0.01	0.01	0.03	239
2027	0.04	0.03	0.19	0.27	< 0.005	0.01	< 0.005	0.01	0.01	< 0.005	0.01	—	45	45	< 0.005	< 0.005	0.01	45

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	< 0.005	< 0.005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Area	< 0.005	< 0.005	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00
Total	< 0.005	< 0.005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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. Construction Emissions Details

3.1. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)																							
Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e					
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.44	3.7	5.5	0.01	0.19	—	0.19	0.17	—	0.17	—	858	858	0.03	0.01	—	861					
Dust From Material Movement	—	—	—	—	—	—	0.14	0.14	—	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.03	0.03	0.22	0.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	49	49	< 0.005	< 0.005	—	50
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	< 0.005	8.2	8.2	< 0.005	< 0.005	—	8.2
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.27	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	63	63	< 0.005	< 0.005	0.01	64
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.7	3.7	< 0.005	< 0.005	0.01	3.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.61	0.61	< 0.005	< 0.005	< 0.005	0.62	0.62
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.2	1.0	9.2	9.7	0.02	0.42	—	0.42	0.39	—	0.39	—	1,714	1,714	0.07	0.01	—	1,720
Dust From Material Movement	—	—	—	—	—	—	1.4	1.4	—	0.67	0.67	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.2	1.0	9.2	9.7	0.02	0.42	—	0.42	0.39	—	0.39	—	1,714	1,714	0.07	0.01	—	1,720
Dust From Material Movement	—	—	—	—	—	—	1.4	1.4	—	0.67	0.67	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.1	1.1	< 0.005	0.05	—	0.05	0.05	—	0.05	—	202	202	0.01	< 0.005	—	203	
Dust From Material Movement	—	—	—	—	—	—	0.16	0.16	—	0.08	0.08	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.03	0.02	0.20	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	—	33	33	< 0.005	< 0.005	—	34	
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.04	0.03	0.03	0.54	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	104	104	< 0.005	< 0.005	0.35	105	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.19	0.02	1.9	1.1	0.01	0.02	0.43	0.45	0.02	0.12	0.14	—	1,579	1,579	0.16	0.25	3.2	1,661	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.03	0.03	0.03	0.41	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	95	95	< 0.005	< 0.005	0.01	96	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

Hauling	0.19	0.02	1.9	1.1	0.01	0.02	0.43	0.45	0.02	0.12	0.14	—	1,579	1,579	0.16	0.25	0.08	1,659
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11	11	< 0.005	< 0.005	0.02	11
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	< 0.005	0.23	0.13	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	186	186	0.02	0.03	0.16	196
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.9	1.9	< 0.005	< 0.005	< 0.005	1.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	31	31	< 0.005	< 0.005	0.03	32

3.5. Infrastructure and Tank Installation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)																		
Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	6.5	8.9	0.02	0.25	—	0.25	0.23	—	0.23	—	2,042	2,042	0.08	0.02	—	2,049
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	6.5	8.9	0.02	0.25	—	0.25	0.23	—	0.23	—	2,042	2,042	0.08	0.02	—	2,049
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Infrastructure and Tank Installation (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.89	0.74	6.2	8.9	0.02	0.22	—	0.22	0.20	—	0.20	—	2,042	2,042	0.08	0.02	—	2,049
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.40	0.57	< 0.005	0.01	—	0.01	0.01	—	0.01	—	132	132	0.01	< 0.005	—	132
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	22	22	< 0.005	< 0.005	—	22

Off-Road Equipment	0.58	0.48	4.2	5.3	0.01	0.17	—	0.17	0.15	—	0.15	—	823	823	0.03	0.01	—	826
Paving	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.47	0.60	< 0.005	0.02	—	0.02	0.02	—	0.02	—	92	92	< 0.005	< 0.005	—	93
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.09	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15	15	< 0.005	< 0.005	—	15
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	0.88	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	217	217	< 0.005	0.01	0.02	220
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	25	25	< 0.005	< 0.005	0.04	25
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.1	4.1	< 0.005	< 0.005	0.01	4.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	FOG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.1	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	0.18	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.20	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24	24	< 0.005	< 0.005	—	24

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)																		
Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	—	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	FOG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscaping Equipment	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	0.01	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Other Asphalt Surfaces	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)																		
Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm ent	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)																		
Equipm ent Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Infrastructure and Tank Installation	Building Construction	5/1/2026	2/2/2027	5.0	198	—
Paving	Paving	2/3/2027	3/31/2027	5.0	41	—
Architectural Coating	Architectural Coating	4/1/2027	7/1/2027	5.0	66	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Graders	Diesel	Average	1.00	8.0	148	0.41
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	1.00	8.0	84	0.37
Grading	Graders	Diesel	Average	1.00	6.0	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	6.0	367	0.40
Grading	Tractors/Loaders/Back hoes	Diesel	Average	1.00	7.0	84	0.37
Infrastructure and Tank Installation	Cranes	Diesel	Average	1.00	4.0	367	0.29
Infrastructure and Tank Installation	Forklifts	Diesel	Average	2.0	6.0	82	0.20
Infrastructure and Tank Installation	Tractors/Loaders/Back hoes	Diesel	Average	2.0	8.0	84	0.37
Infrastructure and Tank Installation	Excavators	Diesel	Average	1.00	4.0	36	0.38
Infrastructure and Tank Installation	Off-Highway Trucks	Diesel	Average	1.00	4.0	376	0.38
Paving	Tractors/Loaders/Back hoes	Diesel	Average	1.00	7.0	84	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	4.0	6.0	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	7.0	81	0.42
Paving	Rollers	Diesel	Average	1.00	7.0	36	0.38

Architectural Coating	Air Compressors	Diesel	Average	1.00	6.0	37	0.48
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5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	Worker	5.0	19	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10	HHDT,MHDT
Site Preparation	Hauling	0.00	20	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	Worker	7.5	19	LDA,LDT1,LDT2
Grading	Vendor	—	10	HHDT,MHDT
Grading	Hauling	23	20	HHDT
Grading	Onsite truck	—	—	HHDT
Infrastructure and Tank Installation	Worker	0.00	19	LDA,LDT1,LDT2
Infrastructure and Tank Installation	Vendor	0.00	10	HHDT,MHDT
Infrastructure and Tank Installation	Hauling	0.00	20	HHDT
Infrastructure and Tank Installation	Onsite truck	—	—	HHDT
Paving	Worker	18	19	LDA,LDT1,LDT2
Paving	Vendor	—	10	HHDT,MHDT
Paving	Hauling	0.00	20	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	Worker	0.00	19	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	0.00	0.00	2,561

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	11	0.00	0.00
Grading	8,000	—	32	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.98

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%

5.7. Construction Paving

Phase Name	Land Use	Area Paved (acres)	% Asphalt
Paving	Other Asphalt Surfaces	0.98	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
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2026	0.00	346	0.03	< 0.005
2027	0.00	346	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Other Asphalt Surfaces	Wood Fireplaces	0	0
Other Asphalt Surfaces	Gas Fireplaces	0	0
Other Asphalt Surfaces	Propane Fireplaces	0	0
Other Asphalt Surfaces	Electric Fireplaces	0	0
Other Asphalt Surfaces	No Fireplaces	0	0
Other Asphalt Surfaces	Conventional Wood Stoves	0	0
Other Asphalt Surfaces	Catalytic Wood Stoves	0	0
Other Asphalt Surfaces	Non-Catalytic Wood Stoves	0	0
Other Asphalt Surfaces	Pellet Wood Stoves	0	0

5.10.2. Architectural Coatings

—	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
undefined	0.00	0.00	0.00	0.00	2,561

5.10.3. Landscape Equipment

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Other Asphalt Surfaces	0.00	346	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Other Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Other Asphalt Surfaces	0.00	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

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

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	24	annual days of extreme heat
Extreme Precipitation	3.5	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	6.1	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi. Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi. Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters. Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

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

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

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

6.3. Adjusted Climate Risk Scores

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

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

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	95
AQ-PM	94

AQ-DPM	58
Drinking Water	72
Lead Risk Housing	22
Pesticides	0.00
Toxic Releases	83
Traffic	12
Effect Indicators	—
CleanUp Sites	41
Groundwater	0.35
Haz Waste Facilities/Generators	27
Impaired Water Bodies	0.00
Solid Waste	22
Sensitive Population	—
Asthma	55
Cardio-vascular	72
Low Birth Weights	95
Socioeconomic Factor Indicators	—
Education	64
Housing	35
Linguistic	31
Poverty	48
Unemployment	61

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	40.36956243

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Employed	62.92826896
Median HI	54.94674708
Education	—
Bachelor's or higher	28.6154241
High school enrollment	100
Preschool enrollment	65.63582702
Transportation	—
Auto Access	72.44963429
Active commuting	33.78673168
Social	—
2-parent households	36.59694598
Voting	36.73809829
Neighborhood	—
Alcohol availability	64.37828821
Park access	81.35506224
Retail density	78.51918388
Supermarket access	45.60503016
Tree canopy	4.991659181
Housing	—
Homeownership	61.36276145
Housing habitability	51.12280252
Low-inc homeowner severe housing cost burden	57.80828949
Low-inc renter severe housing cost burden	55.52418837
Uncrowded housing	19.45335558
Health Outcomes	—
Insured adults	39.07352752
Arthritis	82.7
Asthma ER Admissions	46.8

High Blood Pressure	79.0
Cancer (excluding skin)	89.7
Asthma	32.2
Coronary Heart Disease	85.5
Chronic Obstructive Pulmonary Disease	68.2
Diagnosed Diabetes	50.0
Life Expectancy at Birth	59.5
Cognitively Disabled	74.6
Physically Disabled	69.8
Heart Attack ER Admissions	16.0
Mental Health Not Good	32.6
Chronic Kidney Disease	73.0
Obesity	26.8
Pedestrian Injuries	42.8
Physical Health Not Good	40.7
Stroke	75.8
Health Risk Behaviors	—
Binge Drinking	30.9
Current Smoker	36.3
No Leisure Time for Physical Activity	40.8
Climate Change Exposures	—
Wildfire Risk	25.0
SLR Inundation Area	0.0
Children	37.8
Elderly	95.7
English Speaking	63.9
Foreign-born	62.1
Outdoor Workers	27.5

Climate Change Adaptive Capacity	—
Impervious Surface Cover	56.4
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	65.9
Other Decision Support	—
2016 Voting	39.9

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	63
Healthy Places Index Score for Project Location (b)	47
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

8.1. Justifications

Screen		Justification
Construction: Construction Phases		Construction schedule based on provided inputs