

APPENDIX 2

AIR QUALITY / GHG ANALYSES

AIR QUALITY and GHG IMPACT ANALYSES

BN-198

WEST COAST TORAH RETREAT AND CAMP CENTER NEW SYNAGOGUE

RUNNING SPRINGS (SAN BERNARDINO COUNTY), CALIFORNIA

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Project No.: P23-014 AQ

BACKGROUND

The project will be constructed within the existing project site. The proposed synagogue building is 8,814 sf in size. In addition, the project proposes a 2,196-sf outdoor seating area that will be uncovered and an outdoor entry deck 3,146 sf in size that will be covered. No new parking will be provided. Of the total 14,156 sf of new structure only 8,814 sf will be enclosed.

Construction of the project is anticipated to require approximately 12 months to completion with the anticipated start date of construction in March of 2024. The project site is mostly vacant, and development of the site would require site preparation but no demolition. Although there is cut and fill it will balance on-site.

ATMOSPHERIC SETTING

The project area is in the San Bernardino Mountains. The area is characterized by an alpine climate, with substantial winter precipitation in the form of winter snow because of its high elevation. Snowfall, as measured at lake level, averages 61.8 inches each year (although upwards of 100 inches can accumulate on the forested ridges bordering the lake, above 8,000 feet). Snow fall can occur every month except July and August. There are normally 16.5 days each year with measurable snow (0.1 inch or more).

On average, the Bear Valley area receives approximately 24 inches of precipitation per year, with a sharp transition between the western edge of the Valley at the dam and the eastern edge at Baldwin Lake. Historical precipitation consists of both rainfall and snowfall, Within the Big Bear watershed, the precipitation varies with location. The west end of the lake, at the Big Bear dam, receives 14 inches per year.

Daily temperatures in the summer are from 60°F to 70°F. Temperatures in the winter average approximately 35 °F to 40 °F. According to the National Weather Service, the warmest month at Big Bear is July, when the average high is 80.7 °F and the average low is 47.1 °F. The coolest month is January, with an average high of 47.1 °F and an average low of 20.7 °F. There is an average of 1.2 days each year with highs of 90 °F or higher. The highest temperature recorded at Big Bear was 94 °F last recorded on July 15, 1998. The record lowest temperature was -25 °F on January 29, 1979.

AMBIENT AIR QUALITY STANDARDS (AAQS)

In order to gauge the significance of the air quality impacts of the proposed project, those impacts, together with existing background air quality levels, must be compared to the applicable ambient air quality standards. These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect public health and welfare. They are designed to protect those people most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise, called "sensitive receptors." Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed. Recent research has shown, however, that chronic exposure to ozone (the primary ingredient in photochemical smog) may lead to adverse respiratory health even at concentrations close to the ambient standard.

National AAQS were established in 1971 for six pollution species with states retaining the option to add other pollutants, require more stringent compliance, or to include different exposure periods. The initial attainment deadline of 1977 was extended several times in air quality problem areas like Southern California. In 2003, the Environmental Protection Agency (EPA) adopted a rule, which extended and established a new attainment deadline for ozone for the year 2021. Because the State of California had established AAQS several years before the federal action and because of unique air quality problems introduced by the restrictive dispersion meteorology, there is considerable difference between state and national clean air standards. Those standards currently in effect in California are shown in Table 1. Sources and health effects of various pollutants are shown in Table 2.

The Federal Clean Air Act Amendments (CAAA) of 1990 required that the U.S. Environmental Protection Agency (EPA) review all national AAQS in light of currently known health effects. EPA was charged with modifying existing standards or promulgating new ones where appropriate. EPA subsequently developed standards for chronic ozone exposure (8+ hours per day) and for very small diameter particulate matter (called "PM-2.5"). New national AAQS were adopted in 1997 for these pollutants.

Planning and enforcement of the federal standards for PM-2.5 and for ozone (8-hour) were challenged by trucking and manufacturing organizations. In a unanimous decision, the U.S. Supreme Court ruled that EPA did not require specific congressional authorization to adopt national clean air standards. The Court also ruled that health-based standards did not require preparation of a cost-benefit analysis. The Court did find, however, that there was some inconsistency between existing and "new" standards in their required attainment schedules. Such attainment-planning schedule inconsistencies centered mainly on the 8-hour ozone standard. EPA subsequently agreed to downgrade the attainment designation for a large number of communities to "non-attainment" for the 8-hour ozone standard.

Table 1

Ambient Air Quality Standards						
Pollutant	Averaging Time	California Standards ¹		National Standards ²		
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷
Ozone (O ₃) ⁸	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m ³)		0.070 ppm (137 µg/m ³)		
Respirable Particulate Matter (PM ₁₀) ⁹	24 Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m ³		—		
Fine Particulate Matter (PM _{2.5}) ⁹	24 Hour	—	—	35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	12.0 µg/m ³	15 µg/m ³	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m ³)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m ³)		9 ppm (10 mg/m ³)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		—	—	
Nitrogen Dioxide (NO ₂) ¹⁰	1 Hour	0.18 ppm (339 µg/m ³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m ³)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)		0.053 ppm (100 µg/m ³)	Same as Primary Standard	
Sulfur Dioxide (SO ₂) ¹¹	1 Hour	0.25 ppm (655 µg/m ³)	Ultraviolet Fluorescence	75 ppb (196 µg/m ³)	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m ³)	
	24 Hour	0.04 ppm (105 µg/m ³)		0.14 ppm (for certain areas) ¹¹	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas) ¹¹	—	
Lead ^{12,13}	30 Day Average	1.5 µg/m ³	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m ³ (for certain areas) ¹²	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m ³		
Visibility Reducing Particles ¹⁴	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m ³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence			
Vinyl Chloride ¹²	24 Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography			

See footnotes on next page ...

For more information please call ARB-PIO at (916) 322-2990

California Air Resources Board (5/4/16)

Table 1 (continued)

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above $150 \mu\text{g}/\text{m}^3$ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from $15 \mu\text{g}/\text{m}^3$ to $12.0 \mu\text{g}/\text{m}^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at $35 \mu\text{g}/\text{m}^3$, as was the annual secondary standard of $15 \mu\text{g}/\text{m}^3$. The existing 24-hour PM10 standards (primary and secondary) of $150 \mu\text{g}/\text{m}^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard ($1.5 \mu\text{g}/\text{m}^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

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Table 2
Health Effects of Major Criteria Pollutants

Pollutants	Sources	Primary Effects
Carbon Monoxide (CO)	<ul style="list-style-type: none"> • Incomplete combustion of fuels and other carbon-containing substances, such as motor exhaust. • Natural events, such as decomposition of organic matter. 	<ul style="list-style-type: none"> • Reduced tolerance for exercise. • Impairment of mental function. • Impairment of fetal development. • Death at high levels of exposure. • Aggravation of some heart diseases (angina).
Nitrogen Dioxide (NO ₂)	<ul style="list-style-type: none"> • Motor vehicle exhaust. • High temperature stationary combustion. • Atmospheric reactions. 	<ul style="list-style-type: none"> • Aggravation of respiratory illness. • Reduced visibility. • Reduced plant growth. • Formation of acid rain.
Ozone (O ₃)	<ul style="list-style-type: none"> • Atmospheric reaction of organic gases with nitrogen oxides in sunlight. 	<ul style="list-style-type: none"> • Aggravation of respiratory and cardiovascular diseases. • Irritation of eyes. • Impairment of cardiopulmonary function. • Plant leaf injury.
Lead (Pb)	<ul style="list-style-type: none"> • Contaminated soil. 	<ul style="list-style-type: none"> • Impairment of blood function and nerve construction. • Behavioral and hearing problems in children.
Respirable Particulate Matter (PM-10)	<ul style="list-style-type: none"> • Stationary combustion of solid fuels. • Construction activities. • Industrial processes. • Atmospheric chemical reactions. 	<ul style="list-style-type: none"> • Reduced lung function. • Aggravation of the effects of gaseous pollutants. • Aggravation of respiratory and cardio respiratory diseases. • Increased cough and chest discomfort. • Soiling. • Reduced visibility.
Fine Particulate Matter (PM-2.5)	<ul style="list-style-type: none"> • Fuel combustion in motor vehicles, equipment, and industrial sources. • Residential and agricultural burning. • Industrial processes. • Also, formed from photochemical reactions of other pollutants, including NO_x, sulfur oxides, and organics. 	<ul style="list-style-type: none"> • Increases respiratory disease. • Lung damage. • Cancer and premature death. • Reduces visibility and results in surface soiling.
Sulfur Dioxide (SO ₂)	<ul style="list-style-type: none"> • Combustion of sulfur-containing fossil fuels. • Smelting of sulfur-bearing metal ores. • Industrial processes. 	<ul style="list-style-type: none"> • Aggravation of respiratory diseases (asthma, emphysema). • Reduced lung function. • Irritation of eyes. • Reduced visibility. • Plant injury. • Deterioration of metals, textiles, leather, finishes, coatings, etc.

Source: California Air Resources Board, 2002.

Evaluation of the most current data on the health effects of inhalation of fine particulate matter prompted the California Air Resources Board (ARB) to recommend adoption of the statewide PM-2.5 standard that is more stringent than the federal standard. This standard was adopted in 2002. The State PM-2.5 standard is more of a goal in that it does not have specific attainment planning requirements like a federal clean air standard, but only requires continued progress towards attainment.

Similarly, the ARB extensively evaluated health effects of ozone exposure. A new state standard for an 8-hour ozone exposure was adopted in 2005, which aligned with the exposure period for the federal 8-hour standard. The California 8-hour ozone standard of 0.07 ppm is more stringent than the federal 8-hour standard of 0.075 ppm. The state standard, however, does not have a specific attainment deadline. California air quality jurisdictions are required to make steady progress towards attaining state standards, but there are no hard deadlines or any consequences of non-attainment. During the same re-evaluation process, the ARB adopted an annual state standard for nitrogen dioxide (NO₂) that is more stringent than the corresponding federal standard, and strengthened the state one-hour NO₂ standard.

As part of EPA's 2002 consent decree on clean air standards, a further review of airborne particulate matter (PM) and human health was initiated. A substantial modification of federal clean air standards for PM was promulgated in 2006. Standards for PM-2.5 were strengthened, a new class of PM in the 2.5 to 10 micron size was created, some PM-10 standards were revoked, and a distinction between rural and urban air quality was adopted. In December, 2012, the federal annual standard for PM-2.5 was reduced from 15 µg/m³ to 12 µg/m³ which matches the California AAQS. The severity of the basin's non-attainment status for PM-2.5 may be increased by this action and thus require accelerated planning for future PM-2.5 attainment.

In response to continuing evidence that ozone exposure at levels just meeting federal clean air standards is demonstrably unhealthful, EPA had proposed a further strengthening of the 8-hour standard. A new 8-hour ozone standard was adopted in 2015 after extensive analysis and public input. The adopted national 8-hour ozone standard is 0.07 ppm which matches the current California standard. It will require three years of ambient data collection, then 2 years of non-attainment findings and planning protocol adoption, then several years of plan development and approval. Final air quality plans for the new standard are likely to be adopted around 2022. Ultimate attainment of the new standard in ozone problem areas such as Southern California might be after 2025.

In 2010 a new federal one-hour primary standard for nitrogen dioxide (NO₂) was adopted. This standard is more stringent than the existing state standard. Based upon air quality monitoring data in the South Coast Air Basin, the California Air Resources Board has requested the EPA to designate the basin as being in attainment for this standard. The federal standard for sulfur dioxide (SO₂) was also recently revised. However, with minimal combustion of coal and mandatory use of low sulfur fuels in California, SO₂ is typically not a problem pollutant.

BASELINE AIR QUALITY

Existing and probable future levels of air quality in the project area can be best inferred from ambient air quality measurements conducted by the SCAQMD. The data resource in closest proximity to the project site is the Big Bear City Monitoring Station. However, this station only monitors small particulates (PM-2.5). The closest available data for ozone and large particulates (PM-10) is the Crestline Monitoring Station. Data for carbon monoxide and nitrogen oxide were obtained from the San Bernardino 4th Street Monitoring Station. Summary data compiled from these resources is provided in Table 3. Findings are summarized below:

Photochemical smog (ozone) levels frequently exceed standards at Crestline. The 8-hour state ozone standard has exceeded an average of 30 percent of all days in the past four years near the project site while the 1-hour state standard has been violated an average of 17 percent of all days. While ozone levels are still high, they are much lower than 10 to 20 years ago.

Measurements of carbon monoxide have shown very low baseline levels in comparison to the most stringent one- and eight-hour standards.

Respirable dust (PM-10) levels very rarely exceed the state or federal standard PM-10 standard. There have only been two violations in the last four years of measurement days for state PM-10 and no violations of the federal standard. PM-2.5 on any measurement day.

A substantial fraction of PM-10 is comprised of small diameter particulates capable of being inhaled into deep lung tissue (PM-2.5). However, PM-2.5 readings rarely exceed the federal 24-hour PM-2.5 ambient standard and there have been no violations within the previous four years.

Although complete attainment of every clean air standard is not yet imminent, extrapolation of the steady improvement trend suggests that such attainment could occur within the reasonably near future.

Table 3
Air Quality Monitoring Summary (2018-2021)
(Number of Days Standards Were Exceeded, and
Maximum Levels During Such Violations)
(Entries shown as ratios = samples exceeding standard/samples taken)

Pollutant/Standard	2018	2019	2020	2021
Ozone				
1-Hour > 0.09 ppm (S)	57	53	69	65
8-Hour > 0.07 ppm (S)	113	99	118	110
8- Hour > 0.075 ppm (F)	91	79	97	91
Max. 1-Hour Conc. (ppm)	0.142	0.129	0.159	0.148
Max. 8-Hour Conc. (ppm)	0.125	0.112	0.139	0.120
Carbon Monoxide				
8- Hour > 9. ppm (S,F)	0	0	0	0
Max 8-hour Conc. (ppm)	2.0	1.2	1.4	1.6
Nitrogen Dioxide				
1-Hour > 0.18 ppm (S)	0	0	0	0
Max. 1-Hour Conc. (ppm)	0.055	0.056	0.054	0.050
Respirable Particulates (PM-10)				
24-hour > 50 µg/m ³ (S)	1/59	0/54	1/40	0/59
24-hour > 150 µg/m ³ (F)	0/59	0/54	0/40	0/59
Max. 24-Hr. Conc. (µg/m ³)	78.	38.	51.	33.
Fine Particulates (PM-2.5)				
24-Hour > 35 µg/m ³ (F)	0/54	0/46	0/58	0/59
Max. 24-Hr. Conc. (µg/m ³)	17.3	31.0	24.3	24.5

Source: South Coast Air Quality Management District.
Crestline Monitoring Station for Ozone and PM-10.
San Bernardino 4th Street Monitoring Station for CO and NO₂.
Big Bear City Monitoring Station for PM-2.5.

data: WWW.ARB.CA.GOV/ADAM/

AIR QUALITY PLANNING

The Federal Clean Air Act (1977 Amendments) required that designated agencies in any area of the nation not meeting national clean air standards must prepare a plan demonstrating the steps that would bring the area into compliance with all national standards. The SCAB could not meet the deadlines for ozone, nitrogen dioxide, carbon monoxide, or PM-10. In the SCAB, the agencies designated by the governor to develop regional air quality plans are the SCAQMD and the Southern California Association of Governments (SCAG). The two agencies first adopted an Air Quality Management Plan (AQMP) in 1979 and revised it several times as earlier attainment forecasts were shown to be overly optimistic.

The 1990 Federal Clean Air Act Amendment (CAAA) required that all states with air-sheds with “serious” or worse ozone problems submit a revision to the State Implementation Plan (SIP). Substantial reductions in emissions of ROG, NO_x and CO are forecast to continue throughout the next several decades. Unless new particulate control programs are implemented, PM-10 and PM-2.5 are forecast to slightly increase.

The Air Quality Management District (AQMD) adopted an updated clean air “blueprint” in August 2003. The 2003 Air Quality Management Plan (AQMP) was approved by the EPA in 2004. The AQMP outlined the air pollution measures needed to meet federal health-based standards for ozone by 2010 and for particulates (PM-10) by 2006. The 2003 AQMP was based upon the federal one-hour ozone standard which was revoked late in 2005 and replaced by an 8-hour federal standard. Because of the revocation of the hourly standard, a new air quality planning cycle was initiated.

With re-designation of the air basin as non-attainment for the 8-hour ozone standard, a new attainment plan was developed. This plan shifted most of the one-hour ozone standard attainment strategies to the 8-hour standard. As previously noted, the attainment date was to “slip” from 2010 to 2021. The updated attainment plan also includes strategies for ultimately meeting the federal PM-2.5 standard.

Because projected attainment by 2021 required control technologies that did not exist yet, the SCAQMD requested a voluntary “bump-up” from a “severe non-attainment” area to an “extreme non-attainment” designation for ozone. The extreme designation was to allow a longer time period for these technologies to develop. If attainment cannot be demonstrated within the specified deadline without relying on “black-box” measures, EPA would have been required to impose sanctions on the region had the bump-up request not been approved. In April 2010, the EPA approved the change in the non-attainment designation from “severe-17” to “extreme.” This reclassification set a later attainment deadline (2024), but also required the air basin to adopt even more stringent emissions controls.

In other air quality attainment plan reviews, EPA had disapproved part of the SCAB PM-2.5 attainment plan included in the AQMP. EPA stated that the current attainment plan relied on PM-2.5 control regulations that had not yet been approved or implemented. It was expected that several rules that were pending approval would remove the identified deficiencies. If these issues were not resolved within the next several years, federal funding sanctions for transportation projects could

result. The 2012 AQMP included in the current California State Implementation Plan (SIP) was expected to remedy identified PM-2.5 planning deficiencies.

The federal Clean Air Act requires that non-attainment air basins have EPA approved attainment plans in place. This requirement includes the federal one-hour ozone standard even though that standard was revoked almost ten years ago. There was no approved attainment plan for the one-hour federal standard at the time of revocation. Through a legal quirk, the SCAQMD is now required to develop an AQMP for the long since revoked one-hour federal ozone standard. Because the current SIP for the basin contains a number of control measures for the 8-hour ozone standard that are equally effective for one-hour levels, the 2012 AQMP was believed to satisfy hourly attainment planning requirements.

AQMPs are required to be updated at regular intervals. The 2012 AQMP was adopted in early 2013. An updated 2016 AQMP was adopted by the SCAQMD Board in March 2017. The 2016 AQMD demonstrated the emissions reductions shown in Table 4 compared to the 2012 AQMP.

Table 4
Comparison of Emissions by Major Source Category From 2012 AQMP

Pollutant	Stationary Sources	Mobile Sources
VOC	-12%	-3%
NOx	-13%	-1%
SOx	-34%	-23%
PM2.5	-9%	-7%

*source 2016 AQMP

SCAQMD has initiated the development of the 2022 AQMP to address the attainment of the 2015 8-hour ozone standard (70 ppb) for South Coast Air Basin and Coachella Valley which will focus on attaining the 70 ppb 8-hour ozone National Ambient Air Quality Standard (NAAQS) by 2037. On-road vehicles and off-road mobile sources represent the largest categories of NOx emissions. Accomplishment of attainment goals requires an approximate 70% reduction in NOx emissions. Large scale transition to zero emission technologies is a key strategy. To this end, Governor Executive Order N-79-20 requires 100 percent EV sales by 2035 for automobiles and short haul drayage trucks. A full transition to EV buses and heavy-duty long-haul trucks is required by 2045.

The proposed project does not directly relate to the AQMP in that there are no specific air quality programs or regulations governing commercial projects. Conformity with adopted plans, forecasts and programs relative to population, housing, employment and land use is the primary yardstick by which impact significance of planned growth is determined. The SCAQMD, however, while acknowledging that the AQMP is a growth-accommodating document, does not favor designating regional impacts as less-than-significant just because the proposed development is consistent with regional growth projections. Air quality impact significance for the proposed project has therefore been analyzed on a project-specific basis.

AIR QUALITY IMPACT

STANDARDS OF SIGNIFICANCE

Air quality impacts are considered “significant” if they cause clean air standards to be violated where they are currently met, or if they “substantially” contribute to an existing violation of standards. Any substantial emissions of air contaminants for which there is no safe exposure, or nuisance emissions such as dust or odors, would also be considered a significant impact.

Appendix G of the California CEQA Guidelines offers the following four tests of air quality impact significance. A project would have a potentially significant impact if it:

- a) Conflicts with or obstructs implementation of the applicable air quality plan.
- b) Results in a cumulatively considerable net increase of any criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard.
- c) Exposes sensitive receptors to substantial pollutant concentrations.
- d) Creates objectionable odors affecting a substantial number of people.

Primary Pollutants

Air quality impacts generally occur on two scales of motion. Near an individual source of emissions or a collection of sources such as a crowded intersection or parking lot, levels of those pollutants that are emitted in their already unhealthful form will be highest. Carbon monoxide (CO) is an example of such a pollutant. Primary pollutant impacts can generally be evaluated directly in comparison to appropriate clean air standards. Violations of these standards where they are currently met, or a measurable worsening of an existing or future violation, would be considered a significant impact. Many particulates, especially fugitive dust emissions, are also primary pollutants. Because of the non-attainment status of the South Coast Air Basin (SCAB) for PM-10, an aggressive dust control program is required to control fugitive dust during project construction.

Secondary Pollutants

Many pollutants, however, require time to transform from a more benign form to a more unhealthful contaminant. Their impact occurs regionally far from the source. Their incremental regional impact is minute on an individual basis and cannot be quantified except through complex photochemical computer models. Analysis of significance of such emissions is based upon a specified number of emissions (pounds, tons, etc.) even though there is no way to translate those emissions directly into a corresponding ambient air quality impact.

Because of the chemical complexity of primary versus secondary pollutants, the SCAQMD has designated significant emissions levels as surrogates for evaluating regional air quality impact significance independent of chemical transformation processes. Projects with daily emissions that

exceed any of the following emission thresholds are recommended by the SCAQMD to be considered significant under CEQA guidelines.

**Table 5
Daily Emissions Thresholds**

Pollutant	Construction	Operations
ROG	75	55
NOx	100	55
CO	550	550
PM-10	150	150
PM-2.5	55	55
SOx	150	150
Lead	3	3

Source: SCAQMD CEQA Air Quality Handbook, November, 1993 Rev.

CONSTRUCTION ACTIVITY IMPACTS

CalEEMod was developed by the SCAQMD to provide a model by which to calculate both construction emissions and operational emissions from a variety of land use projects. It calculates both the daily maximum and annual average emissions for criteria pollutants as well as total or annual greenhouse gas (GHG) emissions.

The proposed synagogue building will be constructed within the existing project site. The proposed synagogue building is 8,814 sf in size. In addition, the project proposes a 2,196-sf outdoor seating area that will be uncovered and an outdoor entry deck 3,146 sf in size that will be covered. No new parking will be provided. Of the total 14,156 sf of new structure only 8,814 sf will be enclosed.

Construction was modeled in CalEEMod2020.4.0 using the following construction equipment and schedule shown in Table 6 with a start date of March 2024.

**Table 6
Construction Activity Equipment Fleet**

Phase Name and Duration	Equipment
Site Prep (1 day)	1 Grader
	1 Loader/Backhoe
Grading (2 days)	1 Grader
	1 Dozer
	1 Loader/Backhoe
Construction (200 days)	1 Crane
	2 Loader/Backhoes
	2 Forklifts
Paving (5 days)	1 Paver
	4 Mixers
	1 Loader/Backhoe
	1 Roller

Utilizing this indicated equipment fleet and durations shown in Table 6 the following worst-case daily construction emissions are calculated by CalEEMod and are listed in Table 7.

**Table 7
Construction Activity Emissions
Maximum Daily Emissions (pounds/day)**

Maximal Construction Emissions	ROG	NOx	CO	SO₂	PM-10	PM-2.5
2024	0.9	9.7	8.8	0.0	5.8	2.9
2025	13.9	6.1	9.5	0.0	0.5	0.3
SCAQMD Thresholds	75	100	550	150	150	55

As shown in Table 7, peak daily emissions would be less than their respective significance thresholds.

Construction equipment exhaust contains carcinogenic compounds within the diesel exhaust particulates. The toxicity of diesel exhaust is evaluated relative to a 24-hour per day, 365 days per year, 70-year lifetime exposure. The SCAQMD does not generally require the analysis of construction-related diesel emissions relative to health risk due to the short period for which the majority of diesel exhaust would occur. Health risk analyses are typically assessed over a 9-, 30-, or 70-year timeframe and not over a relatively brief construction period due to the lack of health risk associated with such a brief exposure.

LOCALIZED SIGNIFICANCE THRESHOLDS

The SCAQMD has developed analysis parameters to evaluate ambient air quality on a local level in addition to the more regional emissions-based thresholds of significance. These analysis elements are called Localized Significance Thresholds (LSTs). LSTs were developed in response to Governing Board’s Environmental Justice Enhancement Initiative 1-4 and the LST

methodology was provisionally adopted in October 2003 and formally approved by SCAQMD's Mobile Source Committee in February 2005.

Use of an LST analysis for a project is optional. For the proposed project, the primary source of possible LST impact would be during construction. LSTs are applicable for a sensitive receptor where it is possible that an individual could remain for 24 hours such as a residence, hospital or convalescent facility.

LSTs are only applicable to the following criteria pollutants: oxides of nitrogen (NO_x), carbon monoxide (CO), and particulate matter (PM-10 and PM-2.5). LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor.

The SCAQMD has issued guidance on applying CalEEMod to LSTs. LST pollutant screening level concentration data is currently published for 1-, 2- and 5-acre sites for varying distances. For this project, the most stringent thresholds for a 1-acre site were applied.

LST screening tables are available for 25, 50-, 100-, 200- and 500-meter source-receptor distances. For this project, the closest existing residence is approximately 300 feet southeast of the proposed synagogue so that data for a 100-meter receptor distance was used.

The following thresholds and emissions in Table 8 are therefore determined (pounds per day):

**Table 8
LST and Project Emissions (pounds/day)**

LST 1 acre/100 meters Central San Bernardino Mountains	CO	NO_x	PM-10	PM-2.5
LST Threshold	2,141	211	33	9
Max On-Site Emissions				
2024	9	10	6	3
2025	9	6	1	1

LSTs were compared to the maximum daily construction activities. As seen in Table 8, emissions meet the LST for construction thresholds. LST impacts are less-than-significant.

OPERATIONAL IMPACTS

The project would not generate any additional trips. However, the new enclosed building will cause a small increase in emissions due to heating, cooling, water use and waste generation. Operational emissions were calculated for an assumed full occupancy year of 2025. The operational impacts are shown in Table 9. As shown, operational emissions will not exceed the applicable SCAQMD CEQA operational emissions thresholds of significance.

**Table 9
Proposed Uses Daily Operational Impacts (2025)**

Source	Operational Emissions (lbs/day)					
	ROG	NO_x	CO	SO₂	PM-10	PM-2.5
Area	0.3	<0.1	<0.1	<0.1	<0.1	<0.1
Energy	<0.1	0.1	0.1	<0.1	<0.1	<0.1
Mobile	0.0	0.0	0.0	<0.1	<0.1	<0.1
Total	0.3	0.1	0.1	<0.1	<0.1	<0.1
SCAQMD Threshold	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Source: CalEEMod Output in Appendix

CONSTRUCTION EMISSIONS MINIMIZATION

Construction activities are not anticipated to cause dust emissions to exceed SCAQMD CEQA thresholds. Nevertheless, emissions minimization through enhanced dust control measures is recommended for use because of the non-attainment status of the air basin and proximity of residential uses. Recommended measures include:

Fugitive Dust Control

- Apply soil stabilizers or moisten inactive areas.
- Water exposed surfaces as needed to avoid visible dust leaving the construction site (typically 2-3 times/day).
- Cover all stock piles with tarps at the end of each day or as needed.
- Provide water spray during loading and unloading of earthen materials.
- Minimize in-out traffic from construction zone
- Cover all trucks hauling dirt, sand, or loose material and require all trucks to maintain at least two feet of freeboard
- Sweep streets daily if visible soil material is carried out from the construction site

Similarly, ozone precursor emissions (ROG and NO_x) are calculated to be below SCAQMD CEQA thresholds. However, because of the regional non-attainment for photochemical smog, the use of reasonably available control measures for diesel exhaust is recommended. Combustion emissions control options include:

Exhaust Emissions Control

- Utilize well-tuned off-road construction equipment.
- Establish a preference for contractors using Tier 3 or better rated heavy equipment.
- Enforce 5-minute idling limits for both on-road trucks and off-road equipment.

GREENHOUSE GAS EMISSIONS

“Greenhouse gases” (so called because of their role in trapping heat near the surface of the earth) emitted by human activity are implicated in global climate change, commonly referred to as “global warming.” These greenhouse gases contribute to an increase in the temperature of the earth’s atmosphere by transparency to short wavelength visible sunlight, but near opacity to outgoing terrestrial long wavelength heat radiation in some parts of the infrared spectrum. The principal greenhouse gases (GHGs) are carbon dioxide, methane, nitrous oxide, ozone, and water vapor. For purposes of planning and regulation, Section 15364.5 of the California Code of Regulations defines GHGs to include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. Fossil fuel consumption in the transportation sector (on-road motor vehicles, off-highway mobile sources, and aircraft) is the single largest source of GHG emissions, accounting for approximately half of GHG emissions globally. Industrial and commercial sources are the second largest contributors of GHG emissions with about one-fourth of total emissions.

California has passed several bills and the Governor has signed at least three executive orders regarding greenhouse gases. GHG statutes and executive orders (EO) include AB 32, SB 1368, EO S-03-05, EO S-20-06 and EO S-01-07.

AB 32 is one of the most significant pieces of environmental legislation that California has adopted. Among other things, it is designed to maintain California’s reputation as a “national and international leader on energy conservation and environmental stewardship.” It will have wide-ranging effects on California businesses and lifestyles as well as far reaching effects on other states and countries. A unique aspect of AB 32, beyond its broad and wide-ranging mandatory provisions and dramatic GHG reductions are the short time frames within which it must be implemented. Major components of the AB 32 include:

- Require the monitoring and reporting of GHG emissions beginning with sources or categories of sources that contribute the most to statewide emissions.
- Requires immediate “early action” control programs on the most readily controlled GHG sources.
- Mandates that by 2020, California’s GHG emissions be reduced to 1990 levels.
- Forces an overall reduction of GHG gases in California by 25-40%, from business as usual, to be achieved by 2020.
- Must complement efforts to achieve and maintain federal and state ambient air quality standards and to reduce toxic air contaminants.

Statewide, the framework for developing the implementing regulations for AB 32 is under way. Maximum GHG reductions are expected to derive from increased vehicle fuel efficiency, from greater use of renewable energy and from increased structural energy efficiency. Additionally, through the California Climate Action Registry (CCAR now called the Climate Action Reserve), general and industry-specific protocols for assessing and reporting GHG emissions have been

developed. GHG sources are categorized into direct sources (i.e. company owned) and indirect sources (i.e. not company owned). Direct sources include combustion emissions from on-and off-road mobile sources, and fugitive emissions. Indirect sources include off-site electricity generation and non-company owned mobile sources.

THRESHOLDS OF SIGNIFICANCE

In response to the requirements of SB97, the State Resources Agency developed guidelines for the treatment of GHG emissions under CEQA. These new guidelines became state laws as part of Title 14 of the California Code of Regulations in March, 2010. The CEQA Appendix G guidelines were modified to include GHG as a required analysis element. A project would have a potentially significant impact if it:

- Generates GHG emissions, directly or indirectly, that may have a significant impact on the environment, or,
- Conflicts with an applicable plan, policy or regulation adopted to reduce GHG emissions.

Section 15064.4 of the Code specifies how significance of GHG emissions is to be evaluated. The process is broken down into quantification of project related GHG emissions, making a determination of significance, and specification of any appropriate mitigation if impacts are found to be potentially significant. At each of these steps, the new GHG guidelines afford the lead agency with substantial flexibility.

Emissions identification may be quantitative, qualitative, or based on performance standards. CEQA guidelines allow the lead agency to “select the model or methodology it considers most appropriate.” The most common practice for transportation/combustion GHG emissions quantification is to use a computer model such as CalEEMod, as was used in the ensuing analysis.

The significance of those emissions then must be evaluated; the selection of a threshold of significance must take into consideration what level of GHG emissions would be cumulatively considerable. The guidelines are clear that they do not support a zero net emissions threshold. If the lead agency does not have sufficient expertise in evaluating GHG impacts, it may rely on thresholds adopted by an agency with greater expertise.

On December 5, 2008 the SCAQMD Governing Board adopted an Interim quantitative GHG Significance Threshold for industrial projects where the SCAQMD is the lead agency (e.g., stationary source permit projects, rules, plans, etc.) of 10,000 Metric Tons (MT) CO₂ equivalent/year. In September 2010, the SCAQMD CEQA Significance Thresholds GHG Working Group released revisions which recommended a threshold of 3,000 MT CO₂e for all land use projects. This 3,000 MT/year recommendation has been used as a guideline for this analysis. In the absence of an adopted numerical threshold of significance, project related GHG emissions in excess of the guideline level are presumed to trigger a requirement for enhanced GHG reduction at the project level.

PROJECT RELATED GHG EMISSIONS GENERATION

Construction Activity GHG Emissions

The project is assumed to require less than one year of construction but will span two calendar years. During project construction, the CalEEMod2020.4.0 computer model predicts that the construction activities will generate the annual CO₂e emissions identified in Table 10.

Table 10
Construction Emissions (Metric Tons CO₂e)

Year 2024	147.8
Year 2025	4.0
Total	151.8
Amortized	5.1

CalEEMod Output provided in appendix

SCAQMD GHG emissions policy from construction activities is to amortize emissions over a 30-year lifetime. The amortized level is also provided. GHG impacts from construction are considered individually less-than-significant.

Project Operational GHG Emissions

The input assumptions for operational GHG emissions calculations, and the GHG conversion from consumption to annual regional CO₂e emissions are summarized in the modeling output files found in the appendix of this report. As discussed, the project is not anticipated to create any new vehicular trips.

The total operational and annualized construction emissions for the proposed project are identified in Table 11. The project GHG emissions are considered less-than-significant.

Table 11
Operational Emissions
(Metric Tons CO₂e)

Consumption Source	MT CO₂e
Area Sources	0.0
Energy Utilization	49.6
Mobile Source	0.0
Solid Waste Generation	40.6
Water Consumption	3.0
Construction	5.1
Total	98.3
Guideline Threshold	3,000

CONSISTENCY WITH GHG PLANS, PROGRAMS AND POLICIES

In March 2014, the San Bernardino Associated Governments and Participating San Bernardino County Cities Partnership (Partnership) created a final draft of the San Bernardino County Regional Greenhouse Gas Reduction Plan (Reduction Plan) for each of the 25 jurisdictional Partner Cities in the County. The plan was recently updated in March of 2021. The Reduction Plan was created in accordance with AB 32, which established a greenhouse gas limit for the state of California. The Reduction Plan seeks to create an inventory of GHG gases and develop jurisdiction specific GHG reduction measures and baseline information that could be used by the Partnership Cities of San Bernardino County, including the County itself.

Projects that demonstrate consistency with the strategies, actions, and emission reduction targets contained in the Reduction Plan would have a less than significant impact on climate change. The project will generate little GHG emissions as shown in Table 11. The enclosed portion of the new synagogue is only 8,671 sf. Most emissions will occur during construction and these emissions are minimal. The new building is not anticipated to create any additional trips. Therefore, consistent with the Reduction Plan the project would result in a less than significant impact with respect to GHG emissions.

CALEEMOD2020.4.0 COMPUTER MODEL OUTPUT

- **DAILY EMISISONS**
- **ANNUAL EMISSIONS**

West Coast Torah Retreat and Camp Center Synagogue - San Bernardino-South Coast County, Summer

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

**West Coast Torah Retreat and Camp Center Synagogue
San Bernardino-South Coast County, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Place of Worship	14.16	1000sqft	0.32	14,156.00	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

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
 Land Use - 8814 sf enclosed
 Construction Phase - Prep: 1 day, Grade: 2 days, Construction: 200 days, Pave: 5 days
 Vehicle Trips - no new trips
 Construction Off-road Equipment Mitigation -
 Trips and VMT - 25 construction workers, 50 trips per day

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	NumDays	100.00	200.00
tblConstructionPhase	PhaseEndDate	8/6/2024	1/14/2025
tblConstructionPhase	PhaseEndDate	7/23/2024	12/10/2024

West Coast Torah Retreat and Camp Center Synagogue - San Bernardino-South Coast County, Summer

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tblConstructionPhase	PhaseEndDate	7/30/2024	1/7/2025
tblConstructionPhase	PhaseStartDate	7/31/2024	1/1/2025
tblConstructionPhase	PhaseStartDate	7/24/2024	1/1/2025
tblTripsAndVMT	WorkerTripNumber	6.00	50.00
tblVehicleTrips	ST_TR	5.99	0.00
tblVehicleTrips	SU_TR	27.63	0.00
tblVehicleTrips	WD_TR	6.95	0.00

2.0 Emissions Summary

West Coast Torah Retreat and Camp Center Synagogue - San Bernardino-South Coast County, Summer

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

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	0.9422	9.7465	8.8447	0.0166	5.4014	0.4005	5.8019	2.5923	0.3685	2.9608	0.0000	1,632.6218	1,632.6218	0.4431	0.0167	1,646.8404
2025	13.9214	6.1016	9.4502	0.0160	0.2124	0.2711	0.4835	0.0563	0.2570	0.3133	0.0000	1,497.4543	1,497.4543	0.3210	3.9400e-003	1,506.6529
Maximum	13.9214	9.7465	9.4502	0.0166	5.4014	0.4005	5.8019	2.5923	0.3685	2.9608	0.0000	1,632.6218	1,632.6218	0.4431	0.0167	1,646.8404

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	0.9422	9.7465	8.8447	0.0166	2.4798	0.4005	2.8803	1.1796	0.3685	1.5481	0.0000	1,632.6218	1,632.6218	0.4431	0.0167	1,646.8404
2025	13.9214	6.1016	9.4502	0.0160	0.2124	0.2711	0.4835	0.0563	0.2570	0.3133	0.0000	1,497.4543	1,497.4543	0.3210	3.9400e-003	1,506.6529
Maximum	13.9214	9.7465	9.4502	0.0166	2.4798	0.4005	2.8803	1.1796	0.3685	1.5481	0.0000	1,632.6218	1,632.6218	0.4431	0.0167	1,646.8404

West Coast Torah Retreat and Camp Center Synagogue - San Bernardino-South Coast County, Summer

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	52.04	0.00	46.48	53.34	0.00	43.15	0.00	0.00	0.00	0.00	0.00	0.00

West Coast Torah Retreat and Camp Center Synagogue - San Bernardino-South Coast County, Summer

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.3164	1.0000e-005	1.4400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.1000e-003	3.1000e-003	1.0000e-005		3.3000e-003
Energy	0.0135	0.1229	0.1033	7.4000e-004		9.3400e-003	9.3400e-003		9.3400e-003	9.3400e-003		147.5144	147.5144	2.8300e-003	2.7000e-003	148.3910
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.3299	0.1229	0.1047	7.4000e-004	0.0000	9.3500e-003	9.3500e-003	0.0000	9.3500e-003	9.3500e-003		147.5175	147.5175	2.8400e-003	2.7000e-003	148.3943

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.3164	1.0000e-005	1.4400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.1000e-003	3.1000e-003	1.0000e-005		3.3000e-003
Energy	0.0135	0.1229	0.1033	7.4000e-004		9.3400e-003	9.3400e-003		9.3400e-003	9.3400e-003		147.5144	147.5144	2.8300e-003	2.7000e-003	148.3910
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.3299	0.1229	0.1047	7.4000e-004	0.0000	9.3500e-003	9.3500e-003	0.0000	9.3500e-003	9.3500e-003		147.5175	147.5175	2.8400e-003	2.7000e-003	148.3943

West Coast Torah Retreat and Camp Center Synagogue - San Bernardino-South Coast County, Summer

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
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	3/1/2024	3/1/2024	5	1	
2	Grading	Grading	3/2/2024	3/5/2024	5	2	
3	Building Construction	Building Construction	3/6/2024	12/10/2024	5	200	
4	Paving	Paving	1/1/2025	1/7/2025	5	5	
5	Architectural Coating	Architectural Coating	1/1/2025	1/14/2025	5	10	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 21,234; Non-Residential Outdoor: 7,078; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Grading	Graders	1	6.00	187	0.41
Site Preparation	Graders	1	8.00	187	0.41

West Coast Torah Retreat and Camp Center Synagogue - San Bernardino-South Coast County, Summer

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

Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

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
Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	50.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	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
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

West Coast Torah Retreat and Camp Center Synagogue - San Bernardino-South Coast County, Summer

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

3.2 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0181	0.0105	0.1748	4.8000e-004	0.0559	2.6000e-004	0.0562	0.0148	2.4000e-004	0.0151		48.9784	48.9784	1.1000e-003	1.1100e-003	49.3378
Total	0.0181	0.0105	0.1748	4.8000e-004	0.0559	2.6000e-004	0.0562	0.0148	2.4000e-004	0.0151		48.9784	48.9784	1.1000e-003	1.1100e-003	49.3378

West Coast Torah Retreat and Camp Center Synagogue - San Bernardino-South Coast County, Summer

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

3.2 Site Preparation - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2386	0.0000	0.2386	0.0258	0.0000	0.0258			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	0.2386	0.2012	0.4398	0.0258	0.1851	0.2109	0.0000	942.2742	942.2742	0.3048		949.8930

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0181	0.0105	0.1748	4.8000e-004	0.0559	2.6000e-004	0.0562	0.0148	2.4000e-004	0.0151		48.9784	48.9784	1.1000e-003	1.1100e-003	49.3378
Total	0.0181	0.0105	0.1748	4.8000e-004	0.0559	2.6000e-004	0.0562	0.0148	2.4000e-004	0.0151		48.9784	48.9784	1.1000e-003	1.1100e-003	49.3378

West Coast Torah Retreat and Camp Center Synagogue - San Bernardino-South Coast County, Summer

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

3.3 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			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	5.3119	0.4001	5.7120	2.5686	0.3681	2.9367		1,364.662 3	1,364.662 3	0.4414		1,375.696 2

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0290	0.0167	0.2797	7.8000e-004	0.0894	4.2000e-004	0.0898	0.0237	3.9000e-004	0.0241		78.3654	78.3654	1.7700e-003	1.7800e-003	78.9405
Total	0.0290	0.0167	0.2797	7.8000e-004	0.0894	4.2000e-004	0.0898	0.0237	3.9000e-004	0.0241		78.3654	78.3654	1.7700e-003	1.7800e-003	78.9405

West Coast Torah Retreat and Camp Center Synagogue - San Bernardino-South Coast County, Summer

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

3.3 Grading - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3904	0.0000	2.3904	1.1559	0.0000	1.1559			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	2.3904	0.4001	2.7905	1.1559	0.3681	1.5240	0.0000	1,364.662 3	1,364.662 3	0.4414		1,375.696 2

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0290	0.0167	0.2797	7.8000e-004	0.0894	4.2000e-004	0.0898	0.0237	3.9000e-004	0.0241		78.3654	78.3654	1.7700e-003	1.7800e-003	78.9405
Total	0.0290	0.0167	0.2797	7.8000e-004	0.0894	4.2000e-004	0.0898	0.0237	3.9000e-004	0.0241		78.3654	78.3654	1.7700e-003	1.7800e-003	78.9405

West Coast Torah Retreat and Camp Center Synagogue - San Bernardino-South Coast County, Summer

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

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5950	5.9739	7.0675	0.0114		0.2824	0.2824		0.2598	0.2598		1,104.9834	1,104.9834	0.3574		1,113.9177
Total	0.5950	5.9739	7.0675	0.0114		0.2824	0.2824		0.2598	0.2598		1,104.9834	1,104.9834	0.3574		1,113.9177

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2900e-003	0.0708	0.0290	3.5000e-004	0.0128	5.2000e-004	0.0133	3.6900e-003	5.0000e-004	4.1900e-003		37.8549	37.8549	9.7000e-004	5.5900e-003	39.5448
Worker	0.1814	0.1046	1.7482	4.8500e-003	0.5589	2.6400e-003	0.5615	0.1482	2.4300e-003	0.1507		489.7836	489.7836	0.0110	0.0111	493.3779
Total	0.1837	0.1754	1.7772	5.2000e-003	0.5717	3.1600e-003	0.5749	0.1519	2.9300e-003	0.1548		527.6384	527.6384	0.0120	0.0167	532.9227

West Coast Torah Retreat and Camp Center Synagogue - San Bernardino-South Coast County, Summer

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

3.4 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5950	5.9739	7.0675	0.0114		0.2824	0.2824		0.2598	0.2598	0.0000	1,104.9834	1,104.9834	0.3574		1,113.9177
Total	0.5950	5.9739	7.0675	0.0114		0.2824	0.2824		0.2598	0.2598	0.0000	1,104.9834	1,104.9834	0.3574		1,113.9177

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2900e-003	0.0708	0.0290	3.5000e-004	0.0128	5.2000e-004	0.0133	3.6900e-003	5.0000e-004	4.1900e-003		37.8549	37.8549	9.7000e-004	5.5900e-003	39.5448
Worker	0.1814	0.1046	1.7482	4.8500e-003	0.5589	2.6400e-003	0.5615	0.1482	2.4300e-003	0.1507		489.7836	489.7836	0.0110	0.0111	493.3779
Total	0.1837	0.1754	1.7772	5.2000e-003	0.5717	3.1600e-003	0.5749	0.1519	2.9300e-003	0.1548		527.6384	527.6384	0.0120	0.0167	532.9227

West Coast Torah Retreat and Camp Center Synagogue - San Bernardino-South Coast County, Summer

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

3.5 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	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

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0608	0.0336	0.5830	1.6800e-003	0.2012	9.0000e-004	0.2021	0.0534	8.3000e-004	0.0542		170.2754	170.2754	3.5700e-003	3.7300e-003	171.4767
Total	0.0608	0.0336	0.5830	1.6800e-003	0.2012	9.0000e-004	0.2021	0.0534	8.3000e-004	0.0542		170.2754	170.2754	3.5700e-003	3.7300e-003	171.4767

West Coast Torah Retreat and Camp Center Synagogue - San Bernardino-South Coast County, Summer

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

3.5 Paving - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0608	0.0336	0.5830	1.6800e-003	0.2012	9.0000e-004	0.2021	0.0534	8.3000e-004	0.0542		170.2754	170.2754	3.5700e-003	3.7300e-003	171.4767
Total	0.0608	0.0336	0.5830	1.6800e-003	0.2012	9.0000e-004	0.2021	0.0534	8.3000e-004	0.0542		170.2754	170.2754	3.5700e-003	3.7300e-003	171.4767

West Coast Torah Retreat and Camp Center Synagogue - San Bernardino-South Coast County, Summer

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

3.6 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.1226					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	13.2935	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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3800e-003	1.8700e-003	0.0324	9.0000e-005	0.0112	5.0000e-005	0.0112	2.9600e-003	5.0000e-005	3.0100e-003		9.4598	9.4598	2.0000e-004	2.1000e-004	9.5265
Total	3.3800e-003	1.8700e-003	0.0324	9.0000e-005	0.0112	5.0000e-005	0.0112	2.9600e-003	5.0000e-005	3.0100e-003		9.4598	9.4598	2.0000e-004	2.1000e-004	9.5265

West Coast Torah Retreat and Camp Center Synagogue - San Bernardino-South Coast County, Summer

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

3.6 Architectural Coating - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.1226					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	13.2935	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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3800e-003	1.8700e-003	0.0324	9.0000e-005	0.0112	5.0000e-005	0.0112	2.9600e-003	5.0000e-005	3.0100e-003		9.4598	9.4598	2.0000e-004	2.1000e-004	9.5265
Total	3.3800e-003	1.8700e-003	0.0324	9.0000e-005	0.0112	5.0000e-005	0.0112	2.9600e-003	5.0000e-005	3.0100e-003		9.4598	9.4598	2.0000e-004	2.1000e-004	9.5265

West Coast Torah Retreat and Camp Center Synagogue - San Bernardino-South Coast County, Summer

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Place of Worship	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
Place of Worship	16.60	8.40	6.90	0.00	95.00	5.00	64	25	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Place of Worship	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

West Coast Torah Retreat and Camp Center Synagogue - San Bernardino-South Coast County, Summer

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

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0135	0.1229	0.1033	7.4000e-004		9.3400e-003	9.3400e-003		9.3400e-003	9.3400e-003		147.5144	147.5144	2.8300e-003	2.7000e-003	148.3910
NaturalGas Unmitigated	0.0135	0.1229	0.1033	7.4000e-004		9.3400e-003	9.3400e-003		9.3400e-003	9.3400e-003		147.5144	147.5144	2.8300e-003	2.7000e-003	148.3910

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Place of Worship	1253.87	0.0135	0.1229	0.1033	7.4000e-004		9.3400e-003	9.3400e-003		9.3400e-003	9.3400e-003		147.5144	147.5144	2.8300e-003	2.7000e-003	148.3910
Total		0.0135	0.1229	0.1033	7.4000e-004		9.3400e-003	9.3400e-003		9.3400e-003	9.3400e-003		147.5144	147.5144	2.8300e-003	2.7000e-003	148.3910

West Coast Torah Retreat and Camp Center Synagogue - San Bernardino-South Coast County, Summer

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

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Place of Worship	1.25387	0.0135	0.1229	0.1033	7.4000e-004		9.3400e-003	9.3400e-003		9.3400e-003	9.3400e-003		147.5144	147.5144	2.8300e-003	2.7000e-003	148.3910
Total		0.0135	0.1229	0.1033	7.4000e-004		9.3400e-003	9.3400e-003		9.3400e-003	9.3400e-003		147.5144	147.5144	2.8300e-003	2.7000e-003	148.3910

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										lb/day					
Mitigated	0.3164	1.0000e-005	1.4400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.1000e-003	3.1000e-003	1.0000e-005		3.3000e-003
Unmitigated	0.3164	1.0000e-005	1.4400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.1000e-003	3.1000e-003	1.0000e-005		3.3000e-003

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	0.0360					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2803					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.3000e-004	1.0000e-005	1.4400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005			3.1000e-003	3.1000e-003	1.0000e-005	3.3000e-003
Total	0.3164	1.0000e-005	1.4400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005			3.1000e-003	3.1000e-003	1.0000e-005	3.3000e-003

West Coast Torah Retreat and Camp Center Synagogue - San Bernardino-South Coast County, Summer

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

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0360					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2803					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.3000e-004	1.0000e-005	1.4400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005			3.1000e-003	3.1000e-003	1.0000e-005	3.3000e-003
Total	0.3164	1.0000e-005	1.4400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005			3.1000e-003	3.1000e-003	1.0000e-005	3.3000e-003

7.0 Water Detail

7.1 Mitigation Measures Water

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

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
----------------	--------	-----------	------------	-------------	-------------	-----------

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

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

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Place of Worship	14.16	1000sqft	0.32	14,156.00	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

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
 Land Use - 8814 sf enclosed
 Construction Phase - Prep: 1 day, Grade: 2 days, Construction: 200 days, Pave: 5 days
 Vehicle Trips - no new trips
 Construction Off-road Equipment Mitigation -
 Trips and VMT - 25 construction workers, 50 trips per day

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	NumDays	100.00	200.00
tblConstructionPhase	PhaseEndDate	8/6/2024	1/14/2025
tblConstructionPhase	PhaseEndDate	7/23/2024	12/10/2024

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

tblConstructionPhase	PhaseEndDate	7/30/2024	1/7/2025
tblConstructionPhase	PhaseStartDate	7/31/2024	1/1/2025
tblConstructionPhase	PhaseStartDate	7/24/2024	1/1/2025
tblTripsAndVMT	WorkerTripNumber	6.00	50.00
tblVehicleTrips	ST_TR	5.99	0.00
tblVehicleTrips	SU_TR	27.63	0.00
tblVehicleTrips	WD_TR	6.95	0.00

2.0 Emissions Summary

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

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.0771	0.6289	0.8685	1.6400e-003	0.0618	0.0291	0.0908	0.0176	0.0267	0.0443	0.0000	146.4923	146.4923	0.0341	1.5900e-003	147.8168
2025	0.0680	0.0181	0.0280	5.0000e-005	5.5000e-004	8.1000e-004	1.3500e-003	1.5000e-004	7.7000e-004	9.2000e-004	0.0000	4.0235	4.0235	7.6000e-004	1.0000e-005	4.0455
Maximum	0.0771	0.6289	0.8685	1.6400e-003	0.0618	0.0291	0.0908	0.0176	0.0267	0.0443	0.0000	146.4923	146.4923	0.0341	1.5900e-003	147.8168

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.0771	0.6289	0.8685	1.6400e-003	0.0587	0.0291	0.0878	0.0161	0.0267	0.0429	0.0000	146.4922	146.4922	0.0341	1.5900e-003	147.8167
2025	0.0680	0.0181	0.0280	5.0000e-005	5.5000e-004	8.1000e-004	1.3500e-003	1.5000e-004	7.7000e-004	9.2000e-004	0.0000	4.0235	4.0235	7.6000e-004	1.0000e-005	4.0455
Maximum	0.0771	0.6289	0.8685	1.6400e-003	0.0587	0.0291	0.0878	0.0161	0.0267	0.0429	0.0000	146.4922	146.4922	0.0341	1.5900e-003	147.8167

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	4.93	0.00	3.33	8.08	0.00	3.14	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	3-1-2024	5-31-2024	0.2328	0.2328
2	6-1-2024	8-31-2024	0.2276	0.2276
3	9-1-2024	11-30-2024	0.2252	0.2252
4	12-1-2024	2-28-2025	0.1109	0.1109
		Highest	0.2328	0.2328

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	0.0577	0.0000	1.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.5000e-004	3.5000e-004	0.0000	0.0000	3.7000e-004
Energy	2.4700e-003	0.0224	0.0188	1.3000e-004		1.7100e-003	1.7100e-003		1.7100e-003	1.7100e-003	0.0000	49.3269	49.3269	2.5700e-003	7.0000e-004	49.6005
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	16.3834	0.0000	16.3834	0.9682	0.0000	40.5892
Water						0.0000	0.0000		0.0000	0.0000	0.1406	2.3885	2.5290	0.0146	3.7000e-004	3.0039
Total	0.0602	0.0224	0.0190	1.3000e-004	0.0000	1.7100e-003	1.7100e-003	0.0000	1.7100e-003	1.7100e-003	16.5240	51.7157	68.2397	0.9854	1.0700e-003	93.1939

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

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0577	0.0000	1.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.5000e-004	3.5000e-004	0.0000	0.0000	3.7000e-004
Energy	2.4700e-003	0.0224	0.0188	1.3000e-004		1.7100e-003	1.7100e-003		1.7100e-003	1.7100e-003	0.0000	49.3269	49.3269	2.5700e-003	7.0000e-004	49.6005
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	16.3834	0.0000	16.3834	0.9682	0.0000	40.5892
Water						0.0000	0.0000		0.0000	0.0000	0.1406	2.3885	2.5290	0.0146	3.7000e-004	3.0039
Total	0.0602	0.0224	0.0190	1.3000e-004	0.0000	1.7100e-003	1.7100e-003	0.0000	1.7100e-003	1.7100e-003	16.5240	51.7157	68.2397	0.9854	1.0700e-003	93.1939

	ROG	NOx	CO	SO2	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	3/1/2024	3/1/2024	5	1	
2	Grading	Grading	3/2/2024	3/5/2024	5	2	
3	Building Construction	Building Construction	3/6/2024	12/10/2024	5	200	

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4	Paving	Paving	1/1/2025	1/7/2025	5	5
5	Architectural Coating	Architectural Coating	1/1/2025	1/14/2025	5	10

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 21,234; Non-Residential Outdoor: 7,078; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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

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
Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

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Building Construction	5	50.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	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
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5000e-004	2.8000e-003	1.9500e-003	0.0000		1.0000e-004	1.0000e-004		9.0000e-005	9.0000e-005	0.0000	0.4274	0.4274	1.4000e-004	0.0000	0.4309
Total	2.5000e-004	2.8000e-003	1.9500e-003	0.0000	2.7000e-004	1.0000e-004	3.7000e-004	3.0000e-005	9.0000e-005	1.2000e-004	0.0000	0.4274	0.4274	1.4000e-004	0.0000	0.4309

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3.2 Site Preparation - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	8.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0205	0.0205	0.0000	0.0000	0.0207
Total	1.0000e-005	1.0000e-005	8.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0205	0.0205	0.0000	0.0000	0.0207

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.2000e-004	0.0000	1.2000e-004	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5000e-004	2.8000e-003	1.9500e-003	0.0000		1.0000e-004	1.0000e-004		9.0000e-005	9.0000e-005	0.0000	0.4274	0.4274	1.4000e-004	0.0000	0.4309
Total	2.5000e-004	2.8000e-003	1.9500e-003	0.0000	1.2000e-004	1.0000e-004	2.2000e-004	1.0000e-005	9.0000e-005	1.0000e-004	0.0000	0.4274	0.4274	1.4000e-004	0.0000	0.4309

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3.2 Site Preparation - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	8.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0205	0.0205	0.0000	0.0000	0.0207
Total	1.0000e-005	1.0000e-005	8.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0205	0.0205	0.0000	0.0000	0.0207

3.3 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.3100e-003	0.0000	5.3100e-003	2.5700e-003	0.0000	2.5700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.1000e-004	9.7300e-003	5.5500e-003	1.0000e-005		4.0000e-004	4.0000e-004		3.7000e-004	3.7000e-004	0.0000	1.2380	1.2380	4.0000e-004	0.0000	1.2480
Total	9.1000e-004	9.7300e-003	5.5500e-003	1.0000e-005	5.3100e-003	4.0000e-004	5.7100e-003	2.5700e-003	3.7000e-004	2.9400e-003	0.0000	1.2380	1.2380	4.0000e-004	0.0000	1.2480

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

3.3 Grading - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.4000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0657	0.0657	0.0000	0.0000	0.0663
Total	3.0000e-005	2.0000e-005	2.4000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0657	0.0657	0.0000	0.0000	0.0663

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.3900e-003	0.0000	2.3900e-003	1.1600e-003	0.0000	1.1600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.1000e-004	9.7300e-003	5.5500e-003	1.0000e-005		4.0000e-004	4.0000e-004		3.7000e-004	3.7000e-004	0.0000	1.2380	1.2380	4.0000e-004	0.0000	1.2480
Total	9.1000e-004	9.7300e-003	5.5500e-003	1.0000e-005	2.3900e-003	4.0000e-004	2.7900e-003	1.1600e-003	3.7000e-004	1.5300e-003	0.0000	1.2380	1.2380	4.0000e-004	0.0000	1.2480

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3.3 Grading - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.4000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0657	0.0657	0.0000	0.0000	0.0663
Total	3.0000e-005	2.0000e-005	2.4000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0657	0.0657	0.0000	0.0000	0.0663

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0595	0.5974	0.7068	1.1400e-003		0.0282	0.0282		0.0260	0.0260	0.0000	100.2424	100.2424	0.0324	0.0000	101.0529
Total	0.0595	0.5974	0.7068	1.1400e-003		0.0282	0.0282		0.0260	0.0260	0.0000	100.2424	100.2424	0.0324	0.0000	101.0529

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3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2000e-004	7.4400e-003	2.9400e-003	4.0000e-005	1.2600e-003	5.0000e-005	1.3100e-003	3.6000e-004	5.0000e-005	4.1000e-004	0.0000	3.4377	3.4377	9.0000e-005	5.1000e-004	3.5912
Worker	0.0162	0.0115	0.1510	4.5000e-004	0.0548	2.6000e-004	0.0551	0.0146	2.4000e-004	0.0148	0.0000	41.0606	41.0606	1.0200e-003	1.0800e-003	41.4068
Total	0.0164	0.0190	0.1539	4.9000e-004	0.0561	3.1000e-004	0.0564	0.0149	2.9000e-004	0.0152	0.0000	44.4983	44.4983	1.1100e-003	1.5900e-003	44.9981

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0595	0.5974	0.7068	1.1400e-003		0.0282	0.0282		0.0260	0.0260	0.0000	100.2423	100.2423	0.0324	0.0000	101.0528
Total	0.0595	0.5974	0.7068	1.1400e-003		0.0282	0.0282		0.0260	0.0260	0.0000	100.2423	100.2423	0.0324	0.0000	101.0528

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3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2000e-004	7.4400e-003	2.9400e-003	4.0000e-005	1.2600e-003	5.0000e-005	1.3100e-003	3.6000e-004	5.0000e-005	4.1000e-004	0.0000	3.4377	3.4377	9.0000e-005	5.1000e-004	3.5912
Worker	0.0162	0.0115	0.1510	4.5000e-004	0.0548	2.6000e-004	0.0551	0.0146	2.4000e-004	0.0148	0.0000	41.0606	41.0606	1.0200e-003	1.0800e-003	41.4068
Total	0.0164	0.0190	0.1539	4.9000e-004	0.0561	3.1000e-004	0.0564	0.0149	2.9000e-004	0.0152	0.0000	44.4983	44.4983	1.1100e-003	1.5900e-003	44.9981

3.5 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.4100e-003	0.0123	0.0176	3.0000e-005		5.5000e-004	5.5000e-004		5.1000e-004	5.1000e-004	0.0000	2.3502	2.3502	6.8000e-004	0.0000	2.3673
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.4100e-003	0.0123	0.0176	3.0000e-005		5.5000e-004	5.5000e-004		5.1000e-004	5.1000e-004	0.0000	2.3502	2.3502	6.8000e-004	0.0000	2.3673

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3.5 Paving - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-004	9.0000e-005	1.2600e-003	0.0000	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3569	0.3569	1.0000e-005	1.0000e-005	0.3598
Total	1.4000e-004	9.0000e-005	1.2600e-003	0.0000	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3569	0.3569	1.0000e-005	1.0000e-005	0.3598

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.4100e-003	0.0123	0.0176	3.0000e-005		5.5000e-004	5.5000e-004		5.1000e-004	5.1000e-004	0.0000	2.3502	2.3502	6.8000e-004	0.0000	2.3673
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.4100e-003	0.0123	0.0176	3.0000e-005		5.5000e-004	5.5000e-004		5.1000e-004	5.1000e-004	0.0000	2.3502	2.3502	6.8000e-004	0.0000	2.3673

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3.5 Paving - 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	1.4000e-004	9.0000e-005	1.2600e-003	0.0000	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3569	0.3569	1.0000e-005	1.0000e-005	0.3598
Total	1.4000e-004	9.0000e-005	1.2600e-003	0.0000	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3569	0.3569	1.0000e-005	1.0000e-005	0.3598

3.6 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0656					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.5000e-004	5.7300e-003	9.0500e-003	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784
Total	0.0665	5.7300e-003	9.0500e-003	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784

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3.6 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.4000e-004	0.0000	5.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0397	0.0397	0.0000	0.0000	0.0400
Total	2.0000e-005	1.0000e-005	1.4000e-004	0.0000	5.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0397	0.0397	0.0000	0.0000	0.0400

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0656					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.5000e-004	5.7300e-003	9.0500e-003	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784
Total	0.0665	5.7300e-003	9.0500e-003	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784

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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	2.0000e-005	1.0000e-005	1.4000e-004	0.0000	5.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0397	0.0397	0.0000	0.0000	0.0400
Total	2.0000e-005	1.0000e-005	1.4000e-004	0.0000	5.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0397	0.0397	0.0000	0.0000	0.0400

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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

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Place of Worship	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
Place of Worship	16.60	8.40	6.90	0.00	95.00	5.00	64	25	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Place of Worship	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

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	24.9042	24.9042	2.1000e-003	2.5000e-004	25.0327
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	24.9042	24.9042	2.1000e-003	2.5000e-004	25.0327
NaturalGas Mitigated	2.4700e-003	0.0224	0.0188	1.3000e-004		1.7100e-003	1.7100e-003		1.7100e-003	1.7100e-003	0.0000	24.4227	24.4227	4.7000e-004	4.5000e-004	24.5678
NaturalGas Unmitigated	2.4700e-003	0.0224	0.0188	1.3000e-004		1.7100e-003	1.7100e-003		1.7100e-003	1.7100e-003	0.0000	24.4227	24.4227	4.7000e-004	4.5000e-004	24.5678

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Place of Worship	457663	2.4700e-003	0.0224	0.0188	1.3000e-004		1.7100e-003	1.7100e-003		1.7100e-003	1.7100e-003	0.0000	24.4227	24.4227	4.7000e-004	4.5000e-004	24.5678
Total		2.4700e-003	0.0224	0.0188	1.3000e-004		1.7100e-003	1.7100e-003		1.7100e-003	1.7100e-003	0.0000	24.4227	24.4227	4.7000e-004	4.5000e-004	24.5678

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Place of Worship	457663	2.4700e-003	0.0224	0.0188	1.3000e-004		1.7100e-003	1.7100e-003		1.7100e-003	1.7100e-003	0.0000	24.4227	24.4227	4.7000e-004	4.5000e-004	24.5678
Total		2.4700e-003	0.0224	0.0188	1.3000e-004		1.7100e-003	1.7100e-003		1.7100e-003	1.7100e-003	0.0000	24.4227	24.4227	4.7000e-004	4.5000e-004	24.5678

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Place of Worship	140428	24.9042	2.1000e-003	2.5000e-004	25.0327
Total		24.9042	2.1000e-003	2.5000e-004	25.0327

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Place of Worship	140428	24.9042	2.1000e-003	2.5000e-004	25.0327
Total		24.9042	2.1000e-003	2.5000e-004	25.0327

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	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	0.0577	0.0000	1.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.5000e-004	3.5000e-004	0.0000	0.0000	3.7000e-004
Unmitigated	0.0577	0.0000	1.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.5000e-004	3.5000e-004	0.0000	0.0000	3.7000e-004

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	6.5600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0512					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.5000e-004	3.5000e-004	0.0000	0.0000	3.7000e-004
Total	0.0577	0.0000	1.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.5000e-004	3.5000e-004	0.0000	0.0000	3.7000e-004

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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	6.5600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0512					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.5000e-004	3.5000e-004	0.0000	0.0000	3.7000e-004
Total	0.0577	0.0000	1.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.5000e-004	3.5000e-004	0.0000	0.0000	3.7000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.5290	0.0146	3.7000e-004	3.0039
Unmitigated	2.5290	0.0146	3.7000e-004	3.0039

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Place of Worship	0.443051 / 0.692977	2.5290	0.0146	3.7000e-004	3.0039
Total		2.5290	0.0146	3.7000e-004	3.0039

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Place of Worship	0.443051 / 0.692977	2.5290	0.0146	3.7000e-004	3.0039
Total		2.5290	0.0146	3.7000e-004	3.0039

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	16.3834	0.9682	0.0000	40.5892
Unmitigated	16.3834	0.9682	0.0000	40.5892

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Place of Worship	80.71	16.3834	0.9682	0.0000	40.5892
Total		16.3834	0.9682	0.0000	40.5892

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Place of Worship	80.71	16.3834	0.9682	0.0000	40.5892
Total		16.3834	0.9682	0.0000	40.5892

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 Not 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
