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**RE: Demler Manure Processing Facility Project Greenhouse Gas Screening Letter  
San Diego County**

The purpose of this Greenhouse Gas (GHG) letter is to identify any impacts, if any, which may be created from the construction and operation of a poultry manure processing project. This report was prepared according to rules and regulations created for consistency with California Global Warming Solutions Act of 2006 – Assembly Bill 32 (AB32), Senate Bill 97 (SB97), California Environmental Quality Act (CEQA). GHGs analyzed in this study are Carbon Dioxide (CO<sub>2</sub>), Methane (CH<sub>4</sub>), and Nitrous Oxide (N<sub>2</sub>O) since these are the most prevalent GHG gases generated from this project type. To standardize GHG calculations, both CH<sub>4</sub> and N<sub>2</sub>O are converted to equivalent amounts of CO<sub>2</sub> and are identified as carbon dioxide equivalent (CO<sub>2</sub>e). CO<sub>2</sub>e is calculated by multiplying the calculated levels of CH<sub>4</sub> and N<sub>2</sub>O by a Global Warming Potential (GWP). The Intergovernmental Panel on Climate Change (IPCC) provides source data for GWP factors for both CH<sub>4</sub> and N<sub>2</sub>O using 100-year factors of 25, 298 respectively (IPCC, 2007). Regulatory requirements are identified in **Attachment A**.

The subject site is located in the Ramona Community Planning Area within unincorporated San Diego County. The project site is located at 25818 State Route 78 (SR 78) (also known as Julian Road) between Rancho Santa Teresa Drive and Casner Road. Access to the site from SR 78 is provided by a private driveway located approximately 1,000 feet west of Rancho Santa Teresa Drive. The overall property on which the existing egg ranch is located spans five contiguous parcels [County Assessor Parcels (APN) 286-030-21, 286-030-22, 286-030-09, 286-031-01, and 286-040-10].

The applicant proposes to construct a 16,200 square foot (SF) manure processing facility with filtered exhaust (ventilation) and minimal lighting and several fixtures on the interior for safety lighting. For purposes of this analysis however it's assumed that up to 80 40-watt LED light fixtures will be installed as a worst case assumption. The poultry manure pelletizing system, which would be within the processing facility, would allow the existing on-site egg ranch to become more efficient in its operations. The poultry manure pelleting system would be capable of converting poultry manure into organic fertilizer pellets. The facility would be powered by three (3) 100 horsepower or 75 kilowatt (kW) electric motors. Processing the manure on-site and converting the

**SDC PDS RCVD 12-20-21**  
**MUP19-004**

waste into pellets would generally reduce the total tonnage of manure generated, which would also result in reduced truck trips required to transport manure off site.

The existing General Plan Regional Category for the subject site is Rural and the General Plan land use designation is Rural Lands (RL-40; 1 dwelling unit per 40 acres). The project is an allowed use under the current A72 (General Agriculture) zone that applies to the property with approval of a Major Use Permit (MUP) from the County of San Diego. The proposed MUP area comprises a 6-acre portion of the overall 362.1-acre existing egg ranch property. Construction activities associated with the proposed project would only disturb 2.7 acres and are expected to be completed within a 6 month timeframe with construction being completed in 2021. It is estimated that no more than 800 cubic yards (CY) of soil (decomposed granite [d.g.]) will be imported to the site and will be utilized on the existing primary access and around the facilities. No improvements are required or proposed for the secondary access drive.

The proposed Project would process up to 1,125 tons of poultry manure generated onsite from the egg farm which is currently being shipped offsite in its raw state. The site operations require up to 5 workers full-time (Michael Baker International, 2020) with up to 10 employee trips daily and up to 16 truck trips daily (26 total daily trips). Once the manure is dried and pelletized, the truck trips would be reduced to a total of no more than 10 daily truck trips with the employee trips remaining the same for a total of 20 trips daily. Trucks are loaded Monday through Saturday from 4:00 a.m. to 3:00 p.m. and are shipped roughly 115 miles away to El Centro. The proposed processed manure would also be shipped up to 115 miles away with El Centro the likely destination for the processed materials which would be suitable for fertilizer. Employees at the Demler Egg Farm would be assumed to be local workers.

Water used onsite during operations would be trucked to the site as needed. It is estimated that up to 400,000 gallons of water will be required each year and would be trucked to the site from the Ramona Water District roughly 10-15 miles away. This equated to roughly 100 trucks per year would be needed for water purposes or roughly 2 trucks per week and a conservative 20 mile distance is assumed.

GHG impacts related to construction and daily operations were calculated using the latest CalEEMod 2016.3.2 air quality and GHG model, which was developed by BREEZE Software for South Coast Air Quality Management District (SCAQMD) in 2017. CalEEMod inputs/outputs are shown in **Attachment B** to this letter. The County recognizes the CalEEMod Version 2016.3.2 as an acceptable model for projects of this nature. Due to the limitations of CalEEMod, since heavy truck trips are located in El Centro and employee trips are local, two separate models were run to reflect the appropriate trips and vehicle types. It should be noted that CalEEMod has since released version 2020.4.0 though at the time this report was started was not available.

CalEEMod 2016.3.2 has been found to yield slightly higher emissions than 2020.4.0 and is conservative.

The County currently does not have specific screening thresholds to quantitatively determine GHG impacts, though does recognize screening thresholds published by the California Air Pollution Control Officers Association (CAPCOA) for determining the need for additional analysis and mitigation for GHG-related impacts under CEQA (California Air Pollution Control Officers Association, 2008). The CAPCOA white paper recommends a 900 MT CO<sub>2</sub>e/year screening level to determine the size of projects that would be likely to have a less than considerable contribution to the cumulative impact of climate change. Though the CAPCOA 900 MT CO<sub>2</sub>e threshold was set to a 2020 horizon year, the threshold is still relevant and is in fact more conservative when compared to other districts for CEQA level studies. For example, the Sacramento Metropolitan Air Quality Management District (SMAQMD) utilizes a 1,100 MT CO<sub>2</sub>e which was just published in April of 2020 (SMAQMD, 2020).

### **Proposed Project Related Construction Emissions**

The project construction dates were estimated based on a construction kickoff starting and completing approximately 6 months later or sometime completing in 2021. Table 1 shows the expected timeframes for the construction processes for all the project infrastructure, facilities, improvements and structures at the proposed project location, as well as the expected number of pieces of equipment. It should be noted that grading will include a balance scenario with about 3,000 cubic yards of earthwork with an additional 800 CY of imported d.g. for roadway surface preparation. The proposed construction schedule and construction equipment list is identified in Table 1.

The applicant has indicated that the proposed project would be served trucking the water onsite from the Ramona Water District as needed for construction or may utilize an existing fire hydrant adjacent to the site. Since earthwork activities are expected over 13 days, they estimated that 26 truck trips would be necessary for water uses during construction and conservatively were assumed to be 20 mile trips. The only additional water usage from the project would be during operations at the processing plant which would require roughly 400,000 gallons of water per year which will also be trucked to the site from the Ramona Water district located roughly 10-15 miles away. This equated to roughly 100 trucks per year would be needed for water purposes or roughly 2 trucks per week and a conservative 20 mile distance is assumed and CalEEMod has been updated to include these water delivery truck trips for the project.

**Table 1: Expected Construction Equipment and Durations**

Equipment Identification	Proposed Start	Proposed Completion	Quantity
<b>Site Preparation</b>	06/01/2021	06/07/2021	
Rubber Tired Dozers			1
Tractors/Loaders/Backhoes			2
<b>Grading</b>	06/08/2021	06/17/2021	
Graders			1
Rubber Tired Dozers			1
Tractors/Loaders/Backhoes			2
<b>Building Construction</b>	06/18/2021	10/29/2021	
Crane			1
Forklifts			3
Generator Sets			1
Tractors/Loaders/Backhoes			3
Welders			1
<b>Architectural Coating</b>	10/06/2021	10/29/2021	
Air Compressor			1

This equipment list is based upon equipment inventory within CalEEMod and through direction from the project applicant.

As noted, CalEEMod has been updated to reflect the anticipated construction activities and dates provided by the Project applicant. Based on this, we find that construction activities will produce approximately 137.66 metric tons of CO<sub>2</sub>e. Given the fact that the total emissions would ultimately contribute to cumulative levels, it is acceptable to average the total construction emission over the life of the project, which is assumed to be 30 years, in order to evaluate Project emissions against those allowed by the General Plan and is consistent with the South Coast Air Quality Management District (SCAQMD) recommendations for construction GHG emissions (SCAQMD, 2008). Based on this, the project would add 4.59 MT per year. A summary of the construction emissions is shown in Table 2.

**Table 2: Expected Annual Construction CO<sub>2</sub>e Emissions Summary**

Year	Bio-CO <sub>2</sub>	NBio-CO <sub>2</sub>	Total CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e (MT)
2021	0.00	136.88	136.88	0.03	0.00	137.66
<b>Total</b>						<b>137.66</b>
<b>Yearly Average Construction Emissions (Metric Tons/year over 30 years)</b>						<b>4.59</b>

Expected Construction emissions are based upon CalEEMod modeling assumptions (Table 1 above)

**Project Related Operational Emissions**

As previously discussed, emissions generated from area, energy, mobile, solid waste and water uses is also calculated within CalEEMod. Since employee and truck trips have significant differences in VMT, two models were prepared and are both provided in **Attachment B**. The calculated operational emissions are identified in Table 3.

**Table 3: Operational Emissions Summary MT/Year**

Year	Bio-BCO <sub>2</sub>	NBio-CO <sub>2</sub>	Total CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e (MT/Yr)
Area	0.00	0.00	0.00	0.00	0.00	0.00
Energy	0.00	240.64	240.64	0.01	0.00	241.46
Mobile (Employee Trips)	0.00	17.51	17.51	0.00	0.00	17.53
Mobile (Truck Trips)	0.00	605.02	605.02	0.05	0.00	606.24
Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00
Water	0.00	1.00	1.00	0.00	0.00	1.00
<b>Sub Total (MT/Year)</b>						<b>866.23</b>
<b>Amortized Construction Emissions (Table 2 above)</b>						<b>4.59</b>
<b>Total Construction and Operations (MT/Year)</b>						<b>870.82</b>
Data is presented in decimal format and columns may not add due to rounding.						

Adding both annual construction emissions and the expected operational emissions from area, energy, mobile, solid waste and water sources, the project would generate emissions of 866.9 MT per year. Given this, the project would not exceed CAPCOA’s 900 MTCO<sub>2</sub>e screening threshold and would not be considered significant by the County.

Generally, the primary goal of the proposed project would be to improve the efficiency of the existing operations by reducing the number of trucks required to transport manure off site. If the project is implemented, the manure will be dried and pelletized which will decrease volume and weight which in turn will reduce truck trips and would reduce GHG emissions when compared to the status quo. From the data presented in Table 3 above, the 10 truck trips daily would generate 606.24 MT CO<sub>2</sub>e per year or 50.52 MT CO<sub>2</sub>e per truck per year. The project is estimated to reduce six (6) daily trips which would be equivalent to roughly a 303.12 MT CO<sub>2</sub>e per year reduction from existing operations.

As described in the project analysis provided above, the proposed project would generate annual GHG emissions that would be below CAPCOA’s screening level threshold. The primary source of GHG emissions generated by the proposed project would be truck trips and the transport of manure off site. With the implementation of the proposed project, the number of daily truck trips would be reduced compared to existing conditions. Based on this, the project would be

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considered less than significant for GHG emissions. If you have any questions, please do not hesitate to contact me directly at (760) 473-1253.

Sincerely,  
Ldn Consulting, Inc.



Jeremy Louden

**Attachment A:** GHG Regulatory Requirements

**Attachment B:** CALEEMOD Inputs/Outputs

**Sources:**

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# *GHG Regulatory Requirements*

## **Federal Greenhouse Gas Regulations**

### **Massachusetts v. EPA**

On April 2, 2007, in *Massachusetts v. EPA*, the Supreme Court directed the EPA Administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare. In making these decisions, the EPA Administrator is required to follow the language of Section 202(a) of the federal Clean Air Act. On December 7, 2009, the EPA Administrator signed a final rule with two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act:

- The Administrator found that elevated concentrations of GHGs— Carbon Dioxide CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), and Sulfur hexafluoride (SF<sub>6</sub>)—in the atmosphere threaten the public health and welfare of current and future generations. This is referred to as the “endangerment finding.”
- The Administrator further found the combined emissions of GHGs—CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and HFCs—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is referred to as the “cause or contribute finding.”

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the Clean Air Act.

## **State Greenhouse Gas Regulations**

### ***Executive Order S-3-05***

EO S-3-05 (June 2005) established the following statewide goals: GHG emissions should be reduced to 2000 levels by 2010, 1990 levels by 2020, and 80 percent below 1990 levels by 2050.

### ***AB 32 and CARB’s Climate Change Scoping Plan***

In furtherance of the goals established in EO S-3-05, the Legislature enacted Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020.

Under AB 32, the California Air Resources Board (CARB) is responsible for and is recognized as having the expertise to carry out and develop the programs and regulations necessary to achieve the GHG emissions reduction mandate of AB 32. Therefore, in furtherance of AB 32,

CARB adopted regulations requiring the reporting and verification of GHG emissions from specified sources, such as industrial facilities, fuel suppliers and electricity importers (see Health & Safety Code Section 35830; Cal. Code Regs., tit. 17, §§95100 et seq.). CARB is also required to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 relatedly authorized CARB to adopt market-based compliance mechanisms to meet the specified requirements. Finally, CARB is ultimately responsible for monitoring compliance and enforcing any rule, regulation, order, emission limitation, emission reduction measure, or market-based compliance mechanism adopted.

In 2007, CARB approved a limit on the statewide GHG emissions level for year 2020 consistent with the determined 1990 baseline (427 million metric tons (MMT) CO<sub>2</sub>e). CARB's adoption of this limit is in accordance with Health and Safety Code Section 38550.

Further, in 2008, CARB adopted the *Climate Change Scoping Plan: A Framework for Change (Scoping Plan)* in accordance with Health and Safety Code Section 38561. The *Scoping Plan* established an overall framework for the measures that will be implemented to reduce California's GHG emissions for various emission sources/sectors to 1990 levels by 2020. The 2008 *Scoping Plan* evaluated opportunities for sector-specific reductions, integrated all CARB and Climate Action Team<sup>1</sup> early actions and additional GHG reduction features by both entities, identified additional measures to be pursued as regulations, and outlined the role of a cap-and-trade program. The key elements of the 2008 *Scoping Plan* include the following (CARB, 2008):

1. Expanding and strengthening existing energy efficiency programs as well as building and appliance standards
2. Achieving a statewide renewable energy mix of 33 percent
3. Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85 percent of California's GHG emissions
4. Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets
5. Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard
6. Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation

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<sup>1</sup> The Climate Action Team is comprised of state agency secretaries and heads of state agencies, boards and departments; these members work to coordinate statewide efforts to implement GHG emissions reduction programs and adaptation programs.



In the 2008 *Scoping Plan*, CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of approximately 28.5 percent from the otherwise projected 2020 emissions level; i.e., those emissions that would occur in 2020, absent GHG-reducing laws and regulations (referred to as “Business-As-Usual” [BAU]). For purposes of calculating this percent reduction, CARB assumed that all new electricity generation would be supplied by natural gas plants, no further regulatory action would impact vehicle fuel efficiency, and building energy efficiency codes would be held at 2005 standards.

In the 2011 Final Supplement to the *Scoping Plan’s* Functional Equivalent Document, CARB revised its estimates of the projected 2020 emissions level in light of the economic recession and the availability of updated information about GHG reduction regulations (CARB, 2011). Based on the new economic data, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of 21.7 percent (down from 28.5 percent) from the BAU conditions. When the 2020 emissions level projection was updated to account for newly implemented regulatory measures, including Pavley I (model years 2009–2016) and the Renewables Portfolio Standard (12 percent to 20 percent), CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of 16 percent (down from 28.5 percent) from the BAU conditions.

In 2014, CARB adopted the *First Update to the Climate Change Scoping Plan: Building on the Framework (First Update)*. The stated purpose of the *First Update* was to “highlight California’s success to date in reducing its GHG emissions and lay the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050.” The *First Update* found that California is on track to meet the 2020 emissions reduction mandate established by AB 32, and noted that California could reduce emissions further by 2030 to levels squarely in line with those needed to stay on track to reduce emissions to 80 percent below 1990 levels by 2050 if the state realizes the expected benefits of existing policy goals.

In conjunction with the *First Update*, CARB identified “six key focus areas comprising major components of the state’s economy to evaluate and describe the larger transformative actions that will be needed to meet the state’s more expansive emission reduction needs by 2050.” Those six areas are: (1) energy; (2) transportation (vehicles/equipment, sustainable communities, housing, fuels, and infrastructure); (3) agriculture; (4) water; (5) waste management; and, (6) natural and working lands. The *First Update* identified key recommended actions for each sector that will facilitate achievement of EO S-3-05’s 2050 reduction goal.

Based on CARB's research efforts presented in the *First Update*, it has a "strong sense of the mix of technologies needed to reduce emissions through 2050." Those technologies include energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings and industrial machinery; decarbonizing electricity and fuel supplies; and, the rapid market penetration of efficient and clean energy technologies.

As part of the *First Update*, CARB recalculated the state's 1990 emissions level using more recent global warming potentials identified by the IPCC. Using the recalculated 1990 emissions level (431 MMT CO<sub>2</sub>e) and the revised 2020 emissions level projection identified in the 2011 Final Supplement, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of approximately 15 percent (instead of 28.5 percent or 16 percent) from the BAU conditions.

In November 2017, CARB released *California's 2017 Climate Change Scoping Plan (Second Update)* for public review and comment (CARB, 2017). This update proposes CARB's strategy for achieving the state's 2030 GHG target as established in Senate Bill (SB) 32 (discussed below). The strategy includes continuing the Cap-and-Trade Program through 2030,<sup>2</sup> inclusive policies and broad support for clean technologies, enhanced industrial efficiency and competitiveness, prioritization of transportation sustainability, continued leadership on clean energy, putting waste resources to beneficial use, supporting resilient agricultural and rural economics and natural and working lands, securing California's water supplies, and cleaning the air and public health. When discussing project-level GHG emissions reduction actions and thresholds, the *Second Update* states "[a]chieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development." However, the *Second Update* also recognizes that such an achievement "may not be feasible or appropriate for every project ... and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA." CARB's Governing Board adopted the *Second Update* in December 2017.

#### *EO B-30-15*

EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under S-3-05 and AB 32. EO B-30-15 set an interim goal of reducing statewide GHG emissions to 40 percent below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing statewide GHG emissions to 80 percent below 1990 levels by 2050 as set forth in S-3-05. To facilitate achievement of this goal, EO B-30-15 calls for an update to CARB's *Scoping Plan* to express the 2030 target in terms of MMT CO<sub>2</sub>e. The EO also calls for state agencies to continue to

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<sup>2</sup> In July 2017, AB 398 was enacted into law, thereby extending the legislatively-authorized lifetime of the Cap-and-Trade Program to December 31, 2030.

develop and implement GHG emission reduction programs in support of the reduction targets. Sector-specific agencies in transportation, energy, water, and forestry were required to prepare GHG reduction plans by September 2015, followed by a report on action taken in relation to these plans in June 2016.

### ***SB 32 and AB 197***

SB 32 and AB 197 (enacted in 2016) are companion bills that set a new statewide GHG reduction target; make changes to CARB's membership, and increase legislative oversight of CARB's climate change-based activities; and expand dissemination of GHG and other air quality-related emissions data to enhance transparency and accountability. More specifically, SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40 percent below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, in order to provide ongoing oversight over implementation of the state's climate policies. AB 197 also added two members of the Legislature to CARB as nonvoting members. The legislation further requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and TACs from reporting facilities; and identify specific information for GHG emissions reduction measures when updating the scoping plan, including information regarding the range of projected GHG emissions and air pollution reductions that result from each measure and the cost-effectiveness (including avoided social costs) of each measure (see Health & Safety Code Section 38562.7).

### **Building Energy**

#### ***Title 24, Part 6***

Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically establishes Building Energy Efficiency Standards that are designed to ensure new buildings and alterations or additions to existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. The California Energy Commission (CEC) is required by law to adopt standards every 3 years that are cost effective for homeowners over the 30-year lifespan of a building. These standards are updated to consider and incorporate new energy efficient technologies and construction methods. As a result, these standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The 2013 Title 24 standards went into effect on July 1, 2014 and were estimated to reduce energy uses between 3.8% to 36.4%, depending on the energy source and land (Architectural Energy Corporation (AEC), 2013).

The 2016 Title 24 standards, which went into effect on January 1, 2017, are the currently applicable standards. When comparing the 2013 and 2016 standards for electrical consumption, it is expected that low-rise, single-family detached homes and multi-family homes would use 12% and 15% less electricity under the 2016 standards, respectively. Similarly, implementation of the 2016 standards is expected to reduce natural gas consumption by 21% in single-family homes and 31% in multi-family homes. Newly constructed non-residential buildings are estimated to achieve a 5% reduction in electricity consumption under the 2016 standards and no significant change relative to natural gas consumption (California Energy Commission, 2015). The current version of CalEEMod used in this analysis, as a default parameter, utilizes compliance with the 2016 Title 24 standards to estimate GHG emissions.

The Project would be required, at a minimum, to comply with the latest version of Title 24 standards at the time the Project seeks building permits. This will likely be the 2019 version of Title 24 which will continue to improve upon the 2016 Standards for residential and nonresidential buildings. One of the most notable changes is the requirement for the installation of rooftop solar on all residential buildings (California Energy Commission, 2017)The 2019 Standards will go into effect on January 1, 2020.

### ***Title 24, Part 11***

In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as CALGreen, and establishes minimum mandatory standards as well as voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and state-owned buildings and schools and hospitals. The CALGreen 2016 standards became effective on January 1, 2017. The mandatory standards require the following (24 CCR Part 11):

- Mandatory reduction in indoor water use through compliance with specified flow rates for plumbing fixtures and fittings

- Mandatory reduction in outdoor water use through compliance with a local water efficient landscaping ordinance or the California Department of Water Resources' Model Water Efficient Landscape Ordinance
- Sixty five (65) percent of construction and demolition waste must be diverted from landfills
- Mandatory inspections of energy systems to ensure optimal working efficiency
- Inclusion of electric vehicle charging stations or designated spaces capable of supporting future charging stations
- Low-pollutant emitting exterior and interior finish materials, such as paints, carpets, vinyl flooring, and particle boards

The CALGreen standards also include voluntary efficiency measures that are provided at two separate tiers and implemented at the discretion of local agencies and applicants. CALGreen's Tier 1 standards call for a 15 percent improvement in energy requirements; stricter water conservation, 10 percent recycled content in building materials, 20 percent permeable paving, 20 percent cement reduction, and cool/solar-reflective roofs. CALGreen's more rigorous Tier 2 standards call for a 30 percent improvement in energy requirements, stricter water conservation, 75 percent diversion of construction and demolition waste, 15 percent recycled content in building materials, 30 percent permeable paving, 25 percent cement reduction, and cool/solar-reflective roofs.

### ***Zero Net Energy Design Goals***

As recognized in the *First Update* to the *Scoping Plan*, the California Public Utilities Commission, CEC, and CARB also have a shared, established goal of achieving zero net energy (ZNE) for new construction in California. As background, the California Public Utilities Commission first set forth its zero net energy goals in the 2008 Energy Efficiency Strategic Plan and the 2011 Big Bold Energy Efficiency Strategies. The key policy timelines include: (1) all new residential construction in California will be zero net energy by 2020, and (2) all new commercial construction in California will be zero net energy by 2030. As most recently defined by the CEC in its 2015 *Integrated Energy Policy Report*, a zero net energy code building is one where the value of the energy produced by on-site renewable energy resources is equal to the value of the energy consumed annually by the building using the CEC's Time Dependent Valuation metric. It should be noted that Title 24 (2019) which will be effective in 2020 requires rooftop solar for all new residential units.

### ***Title 20***

Title 20 of the California Code of Regulations requires manufacturers of appliances to meet state and federal standards for energy and water efficiency. Performance of appliances must

be certified through the CEC to demonstrate compliance with standards. New appliances regulated under Title 20 include: refrigerators, refrigerator-freezers and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwashers; clothes washers and dryers; cooking products; electric motors; low voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing for each type of appliance covered under the regulations and appliances must meet the standards for energy performance, energy design, water performance and water design. Title 20 contains three types of standards for appliances: federal and state standards for federally regulated appliances, state standards for federally regulated appliances, and state standards for non-federally regulated appliances.

### **Mobile Sources**

#### ***AB 1493***

In response to the transportation sector accounting for more than half of California's CO<sub>2</sub> emissions, AB 1493 was enacted in July 2002. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by the state board to be vehicles that are primarily used for noncommercial personal transportation in the state. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. When fully phased in, the near-term (2009–2012) standards will result in a reduction of about 22 percent in GHG emissions compared to the emissions from the 2002 fleet, while the mid-term (2013–2016) standards will result in a reduction of about 30 percent (CARB, 2017).

#### ***EO S-1-07***

Issued in January 2007, EO S-1-07 sets a declining Low Carbon Fuel Standard for GHG emissions measured in CO<sub>2</sub>e grams per unit of fuel energy sold in California. The target of the Low Carbon Fuel Standard is to reduce the carbon intensity of California passenger vehicle fuels by at least 10 percent by 2020. The carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel, including extraction/feedstock production, processing, transportation, and final consumption, per unit of energy delivered. CARB adopted the implementing regulation in April 2009. The regulation is expected to increase the production of biofuels, including those from alternative sources, such as algae, wood, and agricultural waste.

## **SB 375**

SB 375 (2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 required CARB to adopt regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035. Regional metropolitan planning organizations (MPOs) are then responsible for preparing a Sustainable Communities Strategy within their Regional Transportation Plan. The goal of the Sustainable Communities Strategy is to establish a forecasted development pattern for the region that, after considering transportation measures and policies, will achieve, if feasible, the GHG reduction targets. If a Sustainable Communities Strategy is unable to achieve the GHG reduction target, an MPO must prepare an Alternative Planning Strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

Pursuant to Government Code Section 65080(b)(2)(K), a Sustainable Communities Strategy does not: (i) regulate the use of land; (ii) supersede the land use authority of cities and counties; or (iii) require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with it. Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the state-mandated housing element process.

In 2010, CARB adopted the SB 375 targets for the regional metropolitan planning organizations. The targets for the San Diego Association of Governments (SANDAG) are a 7 percent reduction in emissions per capita by 2020 and a 13 percent reduction by 2035. SANDAG completed and adopted its *2050 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS) in October 2011. In November 2011, CARB, by resolution, accepted SANDAG's GHG emissions quantification analysis and determination that, if implemented, the SCS would achieve CARB's 2020 and 2035 GHG emissions reduction targets for the region.

After SANDAG's 2050 RTP/SCS was adopted, a lawsuit was filed by the Cleveland National Forest Foundation and others. The matter was recently resolved by the California Supreme Court (Case No. S223603), which held that SANDAG did not abuse its discretion when certifying its EIR by declining to explicitly engage in an analysis of the consistency of the RTP/SCS' projected 2050 GHG emissions with the GHG reduction goals reflected in Executive Order No. S-3-05.

In 2015, SANDAG adopted the next iteration of its RTP/SCS in accordance with statutorily mandated timelines and no subsequent litigation challenge was filed. More specifically, in

October 2015, SANDAG adopted *San Diego Forward: The Regional Plan*. Like the 2050 RTP/SCS, this planning document meets CARB's 2020 and 2035 reduction targets for the region (SANDAG, 2015). In December 2015, CARB, by resolution, accepted SANDAG's GHG emissions quantification analysis and determination that, if implemented, the SCS would achieve CARB's 2020 and 2035 GHG emissions reduction targets for the region.

### ***Advanced Clean Cars Program***

In January 2012, CARB approved the Advanced Clean Cars program, a new emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars (CARB, 2017). To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that in 2025 cars will emit 75 percent less smog-forming pollution than the average new car sold today. To reduce GHG emissions, CARB, in conjunction with the EPA and the NHTSA, has adopted new GHG standards for model year 2017 to 2025 vehicles; the new standards are estimated to reduce GHG emissions by 34 percent in 2025 (CARB, 2012).

### ***EO B-16-12***

EO B-16-12 (March 2012) directs state entities under the Governor's direction and control to support and facilitate development and distribution of ZEVs. This EO also sets a long-term target of reaching 1.5 million zero-emission vehicles on California's roadways by 2025. On a statewide basis, EO B-16-12 also establishes a GHG emissions reduction target from the transportation sector equaling 80 percent less than 1990 levels by 2050. In furtherance of this EO, the Governor convened an Interagency Working Group on Zero-Emission Vehicles that has published multiple reports regarding the progress made on the penetration of ZEVs in the statewide vehicle fleet. As of January 2018, the Governor has called for as many as 1.5 million EV by 2025 and up to five million EV by 2030 (Office of Governor Edmund G. Brown Jr., 2018).

### ***SB 350***

In 2015, SB 350 – the Clean Energy and Pollution Reduction Act – was enacted into law. As one of its elements, SB 350 establishes a statewide policy for widespread electrification of the transportation sector, recognizing that such electrification is required for achievement of the state's 2030 and 2050 reduction targets (see Public Utilities Code Section 740.12).



## **Renewable Energy Procurement**

### ***SB 1078***

SB 1078 (2002) established the Renewables Portfolio Standard (RPS) program, which requires an annual increase in renewable generation by the utilities equivalent to at least 1 percent of sales, with an aggregate goal of 20 percent by 2017. This goal was subsequently accelerated, requiring utilities to obtain 20 percent of their power from renewable sources by 2010.

### ***SB X1 2***

SB X1 2 (2011) expanded the RPS by establishing that 20 percent of the total electricity sold to retail customers in California per year by December 31, 2013, and 33 percent by December 31, 2020, and in subsequent years be secured from qualifying renewable energy sources. Under the bill, a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and that meets other specified requirements with respect to its location. In addition to the retail sellers previously covered by the RPS, SB X1 2 added local, publicly owned electric utilities to the RPS.

### ***SB 350***

SB 350 (2015) further expanded the RPS by establishing that 50 percent of the total electricity sold to retail customers in California per year by December 31, 2030 be secured from qualifying renewable energy sources. In addition, SB 350 includes the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or class of energy uses on which an energy-efficiency program is focused) of retail customers through energy conservation and efficiency.

### ***SB 100***

SB 100 (2018) has further accelerated and expanded the RPS, requiring achievement of a 50 percent RPS by December 31, 2026 and a 60 percent RPS by December 31, 2030. SB 100 also established a new statewide policy goal that calls for eligible renewable energy resources and zero-carbon resources to supply 100 percent of electricity retail sales and 100 percent of electricity procured to serve all state agencies by December 31, 2045.

## **Water**

### ***EO B-29-15***

In response to drought-related concerns, EO B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25 percent relative to water use in 2013. The term of the EO extended through February 28, 2016, although many of the directives have since become permanent water-efficiency standards and requirements. The EO includes specific directives that set strict limits on water usage in the state. In response to EO B-29-15, the California Department of Water Resources has modified and adopted a revised version of the Model Water Efficient Landscape Ordinance that, among other changes, significantly increases the requirements for landscape water use efficiency and broadens its applicability to include new development projects with smaller landscape areas.

## **Solid Waste**

### ***AB 939 and AB 341***

In 1989, AB 939, known as the Integrated Waste Management Act (Public Resources Code Sections 40000 et seq.), was passed because of the increase in waste stream and the decrease in landfill capacity. The statute established the California Integrated Waste Management Board, which oversees a disposal reporting system. AB 939 mandated a reduction of waste being disposed where jurisdictions were required to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25 percent by 1995 and 50 percent by the year 2000.

AB 341 (2011) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75 percent of solid waste generated be source-reduced, recycled, or composted by the year 2020, and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery (CalRecycle) to develop strategies to achieve the state's policy goal. CalRecycle has conducted multiple workshops and published documents that identify priority strategies that CalRecycle believes would assist the state in reaching the 75 percent goal by 2020.

Increasing the amount of commercial solid waste that is recycled, reused, or composted will reduce GHG emissions primarily by 1) reducing the energy requirements associated with the extraction, harvest, and processing of raw materials and 2) using recyclable materials that require less energy than raw materials to manufacture finished products (CalRecycle, 2018). Increased diversion of organic materials (green and food waste) will also reduce GHG

emissions (CO<sub>2</sub> and CH<sub>4</sub>) resulting from decomposition in landfills by redirecting this material to processes that use the solid waste material to produce vehicle fuels, heat, electricity, or compost.

### **Regulatory Sources:**

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**Demler Egg Farm Manure Processing  
San Diego County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0
User Defined Industrial	1.00	User Defined Unit	3.32	16,200.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	40
<b>Climate Zone</b>	13			<b>Operational Year</b>	2022
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MWhr)</b>	495.89	<b>CH4 Intensity (lb/MWhr)</b>	0.02	<b>N2O Intensity (lb/MWhr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

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Project Characteristics - 2022 RPS

Land Use - Project is 3.32 acre footprint

Construction Phase - Building Construcion provided by the project developer

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - ce

Off-road Equipment - ce

Trips and VMT - Assumes additional hauling trips for water during earthwork activities

Grading - The project would import roughly 800 CY of DG

Architectural Coating - Rule 67 paints

Vehicle Trips - Project proposed trips from 5 trucks per day or 10 trips total( No trips on Sunday) Usr Def Indus. ;In additon the project would truck water onsite at 2 trucks per week to Ramona Water District 15 miles away...assumed 20 miles one way (User Def Com.)

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use - Project would utilize 3 75 kw motors continuously at 80% optimal load for 16 hours per day 365 days per year.  $75kw \cdot .80 \cdot 16 \text{ hrs/day} \cdot 365 \text{ days} \cdot 3 \text{ Units} = 1,051,200 \text{ kWh}$ . Lighting is  $3.2 \cdot 16 \cdot 365 = 18688$

Water And Wastewater - The Project would require 400000 gallons of water

Solid Waste - The project would not generate a significant amount of solid waste each year beyond current operations. The project would create a fertilizer product

Construction Off-road Equipment Mitigation - Tier 3 Mitigation

Fleet Mix - Assume Employee Trips as LDT2 worst case and all truck trips are HHD worst case and are applied to user defined industrial. Assume all water trucks are HHD and are applied to User Defined Commercial

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3

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tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	230.00	96.00
tblEnergyUse	LightingElect	0.00	1.15
tblEnergyUse	NT24E	0.00	64.89
tblFleetMix	HHD	0.02	1.00
tblFleetMix	HHD	0.02	1.00
tblFleetMix	LDA	0.60	0.00

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tblFleetMix	LDA	0.60	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.4790e-003	0.00
tblFleetMix	LHD2	5.4790e-003	0.00
tblFleetMix	MCY	6.0160e-003	0.00
tblFleetMix	MCY	6.0160e-003	0.00
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	1.1220e-003	0.00
tblFleetMix	MH	1.1220e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.9260e-003	0.00
tblFleetMix	OBUS	1.9260e-003	0.00
tblFleetMix	SBUS	7.5300e-004	0.00
tblFleetMix	SBUS	7.5300e-004	0.00
tblFleetMix	UBUS	1.9320e-003	0.00
tblFleetMix	UBUS	1.9320e-003	0.00
tblGrading	MaterialImported	0.00	600.00
tblGrading	MaterialImported	0.00	200.00
tblLandUse	LandUseSquareFeet	0.00	16,200.00
tblLandUse	LotAcreage	0.00	3.32

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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	720.49	495.89
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	25.00	35.00
tblTripsAndVMT	HaulingTripNumber	75.00	91.00
tblVehicleTrips	CW_TL	14.70	20.00
tblVehicleTrips	CW_TL	14.70	115.00
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	0.00	2.00
tblVehicleTrips	ST_TR	0.00	10.00
tblVehicleTrips	WD_TR	0.00	10.00
tblWater	OutdoorWaterUseRate	0.00	400,000.00

## 2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
4	5-1-2021	7-31-2021	0.4463	0.3151
5	8-1-2021	9-30-2021	0.4290	0.3324
		Highest	0.4463	0.3324

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	0.0820	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	240.6430	240.6430	9.7100e-003	1.9400e-003	241.4641
Mobile	0.0516	1.4904	0.4786	6.0600e-003	0.1542	5.6900e-003	0.1599	0.0423	5.4400e-003	0.0478	0.0000	605.0195	605.0195	0.0489	0.0000	606.2411
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.9996	0.9996	4.0000e-005	1.0000e-005	1.0030
<b>Total</b>	<b>0.1337</b>	<b>1.4904</b>	<b>0.4786</b>	<b>6.0600e-003</b>	<b>0.1542</b>	<b>5.6900e-003</b>	<b>0.1599</b>	<b>0.0423</b>	<b>5.4400e-003</b>	<b>0.0478</b>	<b>0.0000</b>	<b>846.6621</b>	<b>846.6621</b>	<b>0.0586</b>	<b>1.9500e-003</b>	<b>848.7082</b>

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**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	0.0820	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	240.6430	240.6430	9.7100e-003	1.9400e-003	241.4641
Mobile	0.0516	1.4904	0.4786	6.0600e-003	0.1542	5.6900e-003	0.1599	0.0423	5.4400e-003	0.0478	0.0000	605.0195	605.0195	0.0489	0.0000	606.2411
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.9996	0.9996	4.0000e-005	1.0000e-005	1.0030
<b>Total</b>	<b>0.1337</b>	<b>1.4904</b>	<b>0.4786</b>	<b>6.0600e-003</b>	<b>0.1542</b>	<b>5.6900e-003</b>	<b>0.1599</b>	<b>0.0423</b>	<b>5.4400e-003</b>	<b>0.0478</b>	<b>0.0000</b>	<b>846.6621</b>	<b>846.6621</b>	<b>0.0586</b>	<b>1.9500e-003</b>	<b>848.7082</b>

	ROG	NOx	CO	SO2	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**

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2021	6/7/2021	5	5	
2	Grading	Grading	6/8/2021	6/17/2021	5	8	
3	Building Construction	Building Construction	6/18/2021	10/29/2021	5	96	
4	Architectural Coating	Architectural Coating	10/6/2021	10/29/2021	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 24,300; Non-Residential Outdoor: 8,100; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	35.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	91.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	7.00	3.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

**3.2 Site Preparation - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0151	0.0000	0.0151	8.2800e-003	0.0000	8.2800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.5500e-003	0.0369	0.0214	4.0000e-005		1.8900e-003	1.8900e-003		1.7400e-003	1.7400e-003	0.0000	3.2413	3.2413	1.0500e-003	0.0000	3.2675
<b>Total</b>	<b>3.5500e-003</b>	<b>0.0369</b>	<b>0.0214</b>	<b>4.0000e-005</b>	<b>0.0151</b>	<b>1.8900e-003</b>	<b>0.0170</b>	<b>8.2800e-003</b>	<b>1.7400e-003</b>	<b>0.0100</b>	<b>0.0000</b>	<b>3.2413</b>	<b>3.2413</b>	<b>1.0500e-003</b>	<b>0.0000</b>	<b>3.2675</b>

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**3.2 Site Preparation - 2021**

**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	1.3000e-004	4.5700e-003	1.1300e-003	1.0000e-005	3.0000e-004	1.0000e-005	3.1000e-004	8.0000e-005	1.0000e-005	1.0000e-004	0.0000	1.3328	1.3328	1.2000e-004	0.0000	1.3358
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-004	7.0000e-005	7.3000e-004	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2157	0.2157	1.0000e-005	0.0000	0.2159
<b>Total</b>	<b>2.3000e-004</b>	<b>4.6400e-003</b>	<b>1.8600e-003</b>	<b>1.0000e-005</b>	<b>5.5000e-004</b>	<b>1.0000e-005</b>	<b>5.6000e-004</b>	<b>1.5000e-004</b>	<b>1.0000e-005</b>	<b>1.7000e-004</b>	<b>0.0000</b>	<b>1.5486</b>	<b>1.5486</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>1.5517</b>

**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					0.0151	0.0000	0.0151	8.2800e-003	0.0000	8.2800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-004	0.0188	0.0230	4.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	3.2413	3.2413	1.0500e-003	0.0000	3.2675
<b>Total</b>	<b>9.0000e-004</b>	<b>0.0188</b>	<b>0.0230</b>	<b>4.0000e-005</b>	<b>0.0151</b>	<b>1.5000e-004</b>	<b>0.0152</b>	<b>8.2800e-003</b>	<b>1.5000e-004</b>	<b>8.4300e-003</b>	<b>0.0000</b>	<b>3.2413</b>	<b>3.2413</b>	<b>1.0500e-003</b>	<b>0.0000</b>	<b>3.2675</b>

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**3.2 Site Preparation - 2021**

**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	1.3000e-004	4.5700e-003	1.1300e-003	1.0000e-005	3.0000e-004	1.0000e-005	3.1000e-004	8.0000e-005	1.0000e-005	1.0000e-004	0.0000	1.3328	1.3328	1.2000e-004	0.0000	1.3358
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-004	7.0000e-005	7.3000e-004	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2157	0.2157	1.0000e-005	0.0000	0.2159
<b>Total</b>	<b>2.3000e-004</b>	<b>4.6400e-003</b>	<b>1.8600e-003</b>	<b>1.0000e-005</b>	<b>5.5000e-004</b>	<b>1.0000e-005</b>	<b>5.6000e-004</b>	<b>1.5000e-004</b>	<b>1.0000e-005</b>	<b>1.7000e-004</b>	<b>0.0000</b>	<b>1.5486</b>	<b>1.5486</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>1.5517</b>

**3.3 Grading - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0263	0.0000	0.0263	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.5000e-003	0.0828	0.0413	9.0000e-005		3.7700e-003	3.7700e-003		3.4700e-003	3.4700e-003	0.0000	7.5145	7.5145	2.4300e-003	0.0000	7.5753
<b>Total</b>	<b>7.5000e-003</b>	<b>0.0828</b>	<b>0.0413</b>	<b>9.0000e-005</b>	<b>0.0263</b>	<b>3.7700e-003</b>	<b>0.0300</b>	<b>0.0135</b>	<b>3.4700e-003</b>	<b>0.0170</b>	<b>0.0000</b>	<b>7.5145</b>	<b>7.5145</b>	<b>2.4300e-003</b>	<b>0.0000</b>	<b>7.5753</b>

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**3.3 Grading - 2021**

**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	3.4000e-004	0.0119	2.9300e-003	3.0000e-005	7.8000e-004	4.0000e-005	8.1000e-004	2.1000e-004	3.0000e-005	2.5000e-004	0.0000	3.4654	3.4654	3.1000e-004	0.0000	3.4732
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-004	1.5000e-004	1.4500e-003	0.0000	5.0000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.4000e-004	0.0000	0.4315	0.4315	1.0000e-005	0.0000	0.4318
<b>Total</b>	<b>5.4000e-004</b>	<b>0.0120</b>	<b>4.3800e-003</b>	<b>3.0000e-005</b>	<b>1.2800e-003</b>	<b>4.0000e-005</b>	<b>1.3100e-003</b>	<b>3.4000e-004</b>	<b>3.0000e-005</b>	<b>3.9000e-004</b>	<b>0.0000</b>	<b>3.8968</b>	<b>3.8968</b>	<b>3.2000e-004</b>	<b>0.0000</b>	<b>3.9050</b>

**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					0.0263	0.0000	0.0263	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0900e-003	0.0426	0.0509	9.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	7.5145	7.5145	2.4300e-003	0.0000	7.5753
<b>Total</b>	<b>2.0900e-003</b>	<b>0.0426</b>	<b>0.0509</b>	<b>9.0000e-005</b>	<b>0.0263</b>	<b>3.1000e-004</b>	<b>0.0266</b>	<b>0.0135</b>	<b>3.1000e-004</b>	<b>0.0138</b>	<b>0.0000</b>	<b>7.5145</b>	<b>7.5145</b>	<b>2.4300e-003</b>	<b>0.0000</b>	<b>7.5753</b>



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**3.3 Grading - 2021**

**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	3.4000e-004	0.0119	2.9300e-003	3.0000e-005	7.8000e-004	4.0000e-005	8.1000e-004	2.1000e-004	3.0000e-005	2.5000e-004	0.0000	3.4654	3.4654	3.1000e-004	0.0000	3.4732
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-004	1.5000e-004	1.4500e-003	0.0000	5.0000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.4000e-004	0.0000	0.4315	0.4315	1.0000e-005	0.0000	0.4318
<b>Total</b>	<b>5.4000e-004</b>	<b>0.0120</b>	<b>4.3800e-003</b>	<b>3.0000e-005</b>	<b>1.2800e-003</b>	<b>4.0000e-005</b>	<b>1.3100e-003</b>	<b>3.4000e-004</b>	<b>3.0000e-005</b>	<b>3.9000e-004</b>	<b>0.0000</b>	<b>3.8968</b>	<b>3.8968</b>	<b>3.2000e-004</b>	<b>0.0000</b>	<b>3.9050</b>

**3.4 Building Construction - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0912	0.8367	0.7956	1.2900e-003		0.0460	0.0460		0.0433	0.0433	0.0000	111.1859	111.1859	0.0268	0.0000	111.8565
<b>Total</b>	<b>0.0912</b>	<b>0.8367</b>	<b>0.7956</b>	<b>1.2900e-003</b>		<b>0.0460</b>	<b>0.0460</b>		<b>0.0433</b>	<b>0.0433</b>	<b>0.0000</b>	<b>111.1859</b>	<b>111.1859</b>	<b>0.0268</b>	<b>0.0000</b>	<b>111.8565</b>

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**3.4 Building Construction - 2021**

**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	4.2000e-004	0.0142	3.7700e-003	4.0000e-005	8.6000e-004	3.0000e-005	8.9000e-004	2.5000e-004	3.0000e-005	2.8000e-004	0.0000	3.4758	3.4758	2.7000e-004	0.0000	3.4824
Worker	1.6500e-003	1.2400e-003	0.0122	4.0000e-005	4.1900e-003	3.0000e-005	4.2200e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.6242	3.6242	1.0000e-004	0.0000	3.6267
<b>Total</b>	<b>2.0700e-003</b>	<b>0.0154</b>	<b>0.0160</b>	<b>8.0000e-005</b>	<b>5.0500e-003</b>	<b>6.0000e-005</b>	<b>5.1100e-003</b>	<b>1.3600e-003</b>	<b>6.0000e-005</b>	<b>1.4200e-003</b>	<b>0.0000</b>	<b>7.1000</b>	<b>7.1000</b>	<b>3.7000e-004</b>	<b>0.0000</b>	<b>7.1091</b>

**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	0.0324	0.6829	0.8579	1.2900e-003		6.5100e-003	6.5100e-003		6.5100e-003	6.5100e-003	0.0000	111.1858	111.1858	0.0268	0.0000	111.8564
<b>Total</b>	<b>0.0324</b>	<b>0.6829</b>	<b>0.8579</b>	<b>1.2900e-003</b>		<b>6.5100e-003</b>	<b>6.5100e-003</b>		<b>6.5100e-003</b>	<b>6.5100e-003</b>	<b>0.0000</b>	<b>111.1858</b>	<b>111.1858</b>	<b>0.0268</b>	<b>0.0000</b>	<b>111.8564</b>

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**3.4 Building Construction - 2021**

**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	4.2000e-004	0.0142	3.7700e-003	4.0000e-005	8.6000e-004	3.0000e-005	8.9000e-004	2.5000e-004	3.0000e-005	2.8000e-004	0.0000	3.4758	3.4758	2.7000e-004	0.0000	3.4824
Worker	1.6500e-003	1.2400e-003	0.0122	4.0000e-005	4.1900e-003	3.0000e-005	4.2200e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.6242	3.6242	1.0000e-004	0.0000	3.6267
<b>Total</b>	<b>2.0700e-003</b>	<b>0.0154</b>	<b>0.0160</b>	<b>8.0000e-005</b>	<b>5.0500e-003</b>	<b>6.0000e-005</b>	<b>5.1100e-003</b>	<b>1.3600e-003</b>	<b>6.0000e-005</b>	<b>1.4200e-003</b>	<b>0.0000</b>	<b>7.1000</b>	<b>7.1000</b>	<b>3.7000e-004</b>	<b>0.0000</b>	<b>7.1091</b>

**3.5 Architectural Coating - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0751					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9700e-003	0.0137	0.0164	3.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	2.2979	2.2979	1.6000e-004	0.0000	2.3019
<b>Total</b>	<b>0.0771</b>	<b>0.0137</b>	<b>0.0164</b>	<b>3.0000e-005</b>		<b>8.5000e-004</b>	<b>8.5000e-004</b>		<b>8.5000e-004</b>	<b>8.5000e-004</b>	<b>0.0000</b>	<b>2.2979</b>	<b>2.2979</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>2.3019</b>

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**3.5 Architectural Coating - 2021**

**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	4.0000e-005	3.0000e-005	3.3000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0971	0.0971	0.0000	0.0000	0.0971
<b>Total</b>	<b>4.0000e-005</b>	<b>3.0000e-005</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0971</b>	<b>0.0971</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0971</b>

**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	0.0751					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3000e-004	0.0122	0.0165	3.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	2.2979	2.2979	1.6000e-004	0.0000	2.3019
<b>Total</b>	<b>0.0756</b>	<b>0.0122</b>	<b>0.0165</b>	<b>3.0000e-005</b>		<b>1.3000e-004</b>	<b>1.3000e-004</b>		<b>1.3000e-004</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>2.2979</b>	<b>2.2979</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>2.3019</b>

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**3.5 Architectural Coating - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.3000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0971	0.0971	0.0000	0.0000	0.0971
<b>Total</b>	<b>4.0000e-005</b>	<b>3.0000e-005</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0971</b>	<b>0.0971</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0971</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

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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	0.0516	1.4904	0.4786	6.0600e-003	0.1542	5.6900e-003	0.1599	0.0423	5.4400e-003	0.0478	0.0000	605.0195	605.0195	0.0489	0.0000	606.2411
Unmitigated	0.0516	1.4904	0.4786	6.0600e-003	0.1542	5.6900e-003	0.1599	0.0423	5.4400e-003	0.0478	0.0000	605.0195	605.0195	0.0489	0.0000	606.2411

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Commercial	0.00	2.00	0.00	2,080	2,080
User Defined Industrial	10.00	10.00	0.00	358,800	358,800
Total	10.00	12.00	0.00	360,880	360,880

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
User Defined Commercial	20.00	6.60	6.60	100.00	0.00	0.00	100	0	0
User Defined Industrial	115.00	6.60	6.60	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Commercial	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
User Defined Industrial	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000







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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			
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	1.06985e+006	240.6430	9.7100e-003	1.9400e-003	241.4641
<b>Total</b>		<b>240.6430</b>	<b>9.7100e-003</b>	<b>1.9400e-003</b>	<b>241.4641</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	1.06985e+006	240.6430	9.7100e-003	1.9400e-003	241.4641
<b>Total</b>		<b>240.6430</b>	<b>9.7100e-003</b>	<b>1.9400e-003</b>	<b>241.4641</b>

**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	0.0820	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Unmitigated	0.0820	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0188					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0633					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
<b>Total</b>	<b>0.0820</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>4.0000e-005</b>

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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	0.0188					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0633					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
<b>Total</b>	<b>0.0820</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>4.0000e-005</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

Demler Egg Farm Manure Processing - San Diego County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.9996	4.0000e-005	1.0000e-005	1.0030
Unmitigated	0.9996	4.0000e-005	1.0000e-005	1.0030

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Commercial	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0 / 0.4	0.9996	4.0000e-005	1.0000e-005	1.0030
<b>Total</b>		<b>0.9996</b>	<b>4.0000e-005</b>	<b>1.0000e-005</b>	<b>1.0030</b>

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**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Commercial	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0 / 0.4	0.9996	4.0000e-005	1.0000e-005	1.0030
<b>Total</b>		<b>0.9996</b>	<b>4.0000e-005</b>	<b>1.0000e-005</b>	<b>1.0030</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**Category/Year**

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

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**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Demler Egg Farm Manure Processing - San Diego County, Annual

**10.0 Stationary Equipment**

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**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**

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Demler Egg Farm Manure Processing with employee trips only - San Diego County, Annual

**Demler Egg Farm Manure Processing with employee trips only  
San Diego County, Annual**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	3.32	16,200.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	40
<b>Climate Zone</b>	13			<b>Operational Year</b>	2022
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MW hr)</b>	495.89	<b>CH4 Intensity (lb/MW hr)</b>	0.02	<b>N2O Intensity (lb/MW hr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**



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Project Characteristics - 2022 RPS

Land Use - Project is 3.32 acre footprint

Construction Phase - Building Construcion provided by the project developer

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - ce

Off-road Equipment - ce

Trips and VMT -

Grading - The project would import roughly 800 CY of DG

Architectural Coating - Rule 67 paints

Vehicle Trips - Project employee trips from 5 employees( No trips on Sunday)

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use - Project would utilize 3 75 kw motors continuously at 80% optimal load for 16 hours per day 365 days per year.  $75\text{kw} \cdot .80 \cdot 16 \text{ hrs/day} \cdot 365\text{days} \cdot 3 \text{ Units} = 1,051,200 \text{ kWh}$ . Lighting is  $3.2 \cdot 16 \cdot 365 = 18688$

Water And Wastewater - The Project would require 400000 gallons of water

Solid Waste - The project would not generate a significant amount of solid waste each year beyond current operations. The project would create a fertilizer product

Construction Off-road Equipment Mitigation - Tier 3 Mitigation

Fleet Mix - Assume Employee Trips as LDT2 worst case and all truck trips are HHD worst case

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3

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tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	230.00	96.00
tblEnergyUse	LightingElect	0.00	1.15
tblEnergyUse	NT24E	0.00	64.89
tblGrading	MaterialImported	0.00	600.00
tblGrading	MaterialImported	0.00	200.00
tblLandUse	LandUseSquareFeet	0.00	16,200.00

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tblLandUse	LotAcreage	0.00	3.32
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	720.49	495.89
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	0.00	10.00
tblVehicleTrips	WD_TR	0.00	10.00
tblWater	OutdoorWaterUseRate	0.00	400,000.00

## 2.0 Emissions Summary

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Demler Egg Farm Manure Processing with employee trips only - San Diego County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
4	5-1-2021	7-31-2021	0.4431	0.3119
5	8-1-2021	9-30-2021	0.4290	0.3324
		Highest	0.4431	0.3324

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	0.0820	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	240.6430	240.6430	9.7100e-003	1.9400e-003	241.4641
Mobile	3.3600e-003	0.0165	0.0495	1.9000e-004	0.0173	1.5000e-004	0.0174	4.6300e-003	1.4000e-004	4.7700e-003	0.0000	17.5068	17.5068	8.5000e-004	0.0000	17.5281
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.9996	0.9996	4.0000e-005	1.0000e-005	1.0030
<b>Total</b>	<b>0.0854</b>	<b>0.0165</b>	<b>0.0495</b>	<b>1.9000e-004</b>	<b>0.0173</b>	<b>1.5000e-004</b>	<b>0.0174</b>	<b>4.6300e-003</b>	<b>1.4000e-004</b>	<b>4.7700e-003</b>	<b>0.0000</b>	<b>259.1494</b>	<b>259.1494</b>	<b>0.0106</b>	<b>1.9500e-003</b>	<b>259.9951</b>

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**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	0.0820	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	240.6430	240.6430	9.7100e-003	1.9400e-003	241.4641
Mobile	3.3600e-003	0.0165	0.0495	1.9000e-004	0.0173	1.5000e-004	0.0174	4.6300e-003	1.4000e-004	4.7700e-003	0.0000	17.5068	17.5068	8.5000e-004	0.0000	17.5281
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.9996	0.9996	4.0000e-005	1.0000e-005	1.0030
<b>Total</b>	<b>0.0854</b>	<b>0.0165</b>	<b>0.0495</b>	<b>1.9000e-004</b>	<b>0.0173</b>	<b>1.5000e-004</b>	<b>0.0174</b>	<b>4.6300e-003</b>	<b>1.4000e-004</b>	<b>4.7700e-003</b>	<b>0.0000</b>	<b>259.1494</b>	<b>259.1494</b>	<b>0.0106</b>	<b>1.9500e-003</b>	<b>259.9951</b>

	ROG	NOx	CO	SO2	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**

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2021	6/7/2021	5	5	
2	Grading	Grading	6/8/2021	6/17/2021	5	8	
3	Building Construction	Building Construction	6/18/2021	10/29/2021	5	96	
4	Architectural Coating	Architectural Coating	10/6/2021	10/29/2021	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 24,300; Non-Residential Outdoor: 8,100; Striped Parking Area: 0 (Architectural Coating – sqft)

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	25.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	75.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	7.00	3.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

**3.2 Site Preparation - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0151	0.0000	0.0151	8.2800e-003	0.0000	8.2800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.5500e-003	0.0369	0.0214	4.0000e-005		1.8900e-003	1.8900e-003		1.7400e-003	1.7400e-003	0.0000	3.2413	3.2413	1.0500e-003	0.0000	3.2675
<b>Total</b>	<b>3.5500e-003</b>	<b>0.0369</b>	<b>0.0214</b>	<b>4.0000e-005</b>	<b>0.0151</b>	<b>1.8900e-003</b>	<b>0.0170</b>	<b>8.2800e-003</b>	<b>1.7400e-003</b>	<b>0.0100</b>	<b>0.0000</b>	<b>3.2413</b>	<b>3.2413</b>	<b>1.0500e-003</b>	<b>0.0000</b>	<b>3.2675</b>



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**3.2 Site Preparation - 2021**

**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	9.0000e-005	3.2600e-003	8.1000e-004	1.0000e-005	2.1000e-004	1.0000e-005	2.2000e-004	6.0000e-005	1.0000e-005	7.0000e-005	0.0000	0.9520	0.9520	9.0000e-005	0.0000	0.9542
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-004	7.0000e-005	7.3000e-004	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2157	0.2157	1.0000e-005	0.0000	0.2159
<b>Total</b>	<b>1.9000e-004</b>	<b>3.3300e-003</b>	<b>1.5400e-003</b>	<b>1.0000e-005</b>	<b>4.6000e-004</b>	<b>1.0000e-005</b>	<b>4.7000e-004</b>	<b>1.3000e-004</b>	<b>1.0000e-005</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.1678</b>	<b>1.1678</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.1701</b>

**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					0.0151	0.0000	0.0151	8.2800e-003	0.0000	8.2800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-004	0.0188	0.0230	4.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	3.2413	3.2413	1.0500e-003	0.0000	3.2675
<b>Total</b>	<b>9.0000e-004</b>	<b>0.0188</b>	<b>0.0230</b>	<b>4.0000e-005</b>	<b>0.0151</b>	<b>1.5000e-004</b>	<b>0.0152</b>	<b>8.2800e-003</b>	<b>1.5000e-004</b>	<b>8.4300e-003</b>	<b>0.0000</b>	<b>3.2413</b>	<b>3.2413</b>	<b>1.0500e-003</b>	<b>0.0000</b>	<b>3.2675</b>

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**3.2 Site Preparation - 2021**

**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	9.0000e-005	3.2600e-003	8.1000e-004	1.0000e-005	2.1000e-004	1.0000e-005	2.2000e-004	6.0000e-005	1.0000e-005	7.0000e-005	0.0000	0.9520	0.9520	9.0000e-005	0.0000	0.9542
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-004	7.0000e-005	7.3000e-004	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2157	0.2157	1.0000e-005	0.0000	0.2159
<b>Total</b>	<b>1.9000e-004</b>	<b>3.3300e-003</b>	<b>1.5400e-003</b>	<b>1.0000e-005</b>	<b>4.6000e-004</b>	<b>1.0000e-005</b>	<b>4.7000e-004</b>	<b>1.3000e-004</b>	<b>1.0000e-005</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.1678</b>	<b>1.1678</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.1701</b>

**3.3 Grading - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0263	0.0000	0.0263	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.5000e-003	0.0828	0.0413	9.0000e-005		3.7700e-003	3.7700e-003		3.4700e-003	3.4700e-003	0.0000	7.5145	7.5145	2.4300e-003	0.0000	7.5753
<b>Total</b>	<b>7.5000e-003</b>	<b>0.0828</b>	<b>0.0413</b>	<b>9.0000e-005</b>	<b>0.0263</b>	<b>3.7700e-003</b>	<b>0.0300</b>	<b>0.0135</b>	<b>3.4700e-003</b>	<b>0.0170</b>	<b>0.0000</b>	<b>7.5145</b>	<b>7.5145</b>	<b>2.4300e-003</b>	<b>0.0000</b>	<b>7.5753</b>

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**3.3 Grading - 2021**

**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	2.8000e-004	9.7900e-003	2.4200e-003	3.0000e-005	6.4000e-004	3.0000e-005	6.7000e-004	1.8000e-004	3.0000e-005	2.0000e-004	0.0000	2.8561	2.8561	2.6000e-004	0.0000	2.8625
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-004	1.5000e-004	1.4500e-003	0.0000	5.0000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.4000e-004	0.0000	0.4315	0.4315	1.0000e-005	0.0000	0.4318
<b>Total</b>	<b>4.8000e-004</b>	<b>9.9400e-003</b>	<b>3.8700e-003</b>	<b>3.0000e-005</b>	<b>1.1400e-003</b>	<b>3.0000e-005</b>	<b>1.1700e-003</b>	<b>3.1000e-004</b>	<b>3.0000e-005</b>	<b>3.4000e-004</b>	<b>0.0000</b>	<b>3.2875</b>	<b>3.2875</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>3.2943</b>

**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					0.0263	0.0000	0.0263	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0900e-003	0.0426	0.0509	9.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	7.5145	7.5145	2.4300e-003	0.0000	7.5753
<b>Total</b>	<b>2.0900e-003</b>	<b>0.0426</b>	<b>0.0509</b>	<b>9.0000e-005</b>	<b>0.0263</b>	<b>3.1000e-004</b>	<b>0.0266</b>	<b>0.0135</b>	<b>3.1000e-004</b>	<b>0.0138</b>	<b>0.0000</b>	<b>7.5145</b>	<b>7.5145</b>	<b>2.4300e-003</b>	<b>0.0000</b>	<b>7.5753</b>

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**3.3 Grading - 2021**

**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	2.8000e-004	9.7900e-003	2.4200e-003	3.0000e-005	6.4000e-004	3.0000e-005	6.7000e-004	1.8000e-004	3.0000e-005	2.0000e-004	0.0000	2.8561	2.8561	2.6000e-004	0.0000	2.8625
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-004	1.5000e-004	1.4500e-003	0.0000	5.0000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.4000e-004	0.0000	0.4315	0.4315	1.0000e-005	0.0000	0.4318
<b>Total</b>	<b>4.8000e-004</b>	<b>9.9400e-003</b>	<b>3.8700e-003</b>	<b>3.0000e-005</b>	<b>1.1400e-003</b>	<b>3.0000e-005</b>	<b>1.1700e-003</b>	<b>3.1000e-004</b>	<b>3.0000e-005</b>	<b>3.4000e-004</b>	<b>0.0000</b>	<b>3.2875</b>	<b>3.2875</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>3.2943</b>

**3.4 Building Construction - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0912	0.8367	0.7956	1.2900e-003		0.0460	0.0460		0.0433	0.0433	0.0000	111.1859	111.1859	0.0268	0.0000	111.8565
<b>Total</b>	<b>0.0912</b>	<b>0.8367</b>	<b>0.7956</b>	<b>1.2900e-003</b>		<b>0.0460</b>	<b>0.0460</b>		<b>0.0433</b>	<b>0.0433</b>	<b>0.0000</b>	<b>111.1859</b>	<b>111.1859</b>	<b>0.0268</b>	<b>0.0000</b>	<b>111.8565</b>

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**3.4 Building Construction - 2021**

**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	4.2000e-004	0.0142	3.7700e-003	4.0000e-005	8.6000e-004	3.0000e-005	8.9000e-004	2.5000e-004	3.0000e-005	2.8000e-004	0.0000	3.4758	3.4758	2.7000e-004	0.0000	3.4824
Worker	1.6500e-003	1.2400e-003	0.0122	4.0000e-005	4.1900e-003	3.0000e-005	4.2200e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.6242	3.6242	1.0000e-004	0.0000	3.6267
<b>Total</b>	<b>2.0700e-003</b>	<b>0.0154</b>	<b>0.0160</b>	<b>8.0000e-005</b>	<b>5.0500e-003</b>	<b>6.0000e-005</b>	<b>5.1100e-003</b>	<b>1.3600e-003</b>	<b>6.0000e-005</b>	<b>1.4200e-003</b>	<b>0.0000</b>	<b>7.1000</b>	<b>7.1000</b>	<b>3.7000e-004</b>	<b>0.0000</b>	<b>7.1091</b>

**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	0.0324	0.6829	0.8579	1.2900e-003		6.5100e-003	6.5100e-003		6.5100e-003	6.5100e-003	0.0000	111.1858	111.1858	0.0268	0.0000	111.8564
<b>Total</b>	<b>0.0324</b>	<b>0.6829</b>	<b>0.8579</b>	<b>1.2900e-003</b>		<b>6.5100e-003</b>	<b>6.5100e-003</b>		<b>6.5100e-003</b>	<b>6.5100e-003</b>	<b>0.0000</b>	<b>111.1858</b>	<b>111.1858</b>	<b>0.0268</b>	<b>0.0000</b>	<b>111.8564</b>

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**3.4 Building Construction - 2021**

**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	4.2000e-004	0.0142	3.7700e-003	4.0000e-005	8.6000e-004	3.0000e-005	8.9000e-004	2.5000e-004	3.0000e-005	2.8000e-004	0.0000	3.4758	3.4758	2.7000e-004	0.0000	3.4824
Worker	1.6500e-003	1.2400e-003	0.0122	4.0000e-005	4.1900e-003	3.0000e-005	4.2200e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.6242	3.6242	1.0000e-004	0.0000	3.6267
<b>Total</b>	<b>2.0700e-003</b>	<b>0.0154</b>	<b>0.0160</b>	<b>8.0000e-005</b>	<b>5.0500e-003</b>	<b>6.0000e-005</b>	<b>5.1100e-003</b>	<b>1.3600e-003</b>	<b>6.0000e-005</b>	<b>1.4200e-003</b>	<b>0.0000</b>	<b>7.1000</b>	<b>7.1000</b>	<b>3.7000e-004</b>	<b>0.0000</b>	<b>7.1091</b>

**3.5 Architectural Coating - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0751					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9700e-003	0.0137	0.0164	3.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	2.2979	2.2979	1.6000e-004	0.0000	2.3019
<b>Total</b>	<b>0.0771</b>	<b>0.0137</b>	<b>0.0164</b>	<b>3.0000e-005</b>		<b>8.5000e-004</b>	<b>8.5000e-004</b>		<b>8.5000e-004</b>	<b>8.5000e-004</b>	<b>0.0000</b>	<b>2.2979</b>	<b>2.2979</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>2.3019</b>

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**3.5 Architectural Coating - 2021**

**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	4.0000e-005	3.0000e-005	3.3000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0971	0.0971	0.0000	0.0000	0.0971
<b>Total</b>	<b>4.0000e-005</b>	<b>3.0000e-005</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0971</b>	<b>0.0971</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0971</b>

**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	0.0751					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3000e-004	0.0122	0.0165	3.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	2.2979	2.2979	1.6000e-004	0.0000	2.3019
<b>Total</b>	<b>0.0756</b>	<b>0.0122</b>	<b>0.0165</b>	<b>3.0000e-005</b>		<b>1.3000e-004</b>	<b>1.3000e-004</b>		<b>1.3000e-004</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>2.2979</b>	<b>2.2979</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>2.3019</b>

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**3.5 Architectural Coating - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.3000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0971	0.0971	0.0000	0.0000	0.0971
<b>Total</b>	<b>4.0000e-005</b>	<b>3.0000e-005</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0971</b>	<b>0.0971</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0971</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**



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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	3.3600e-003	0.0165	0.0495	1.9000e-004	0.0173	1.5000e-004	0.0174	4.6300e-003	1.4000e-004	4.7700e-003	0.0000	17.5068	17.5068	8.5000e-004	0.0000	17.5281
Unmitigated	3.3600e-003	0.0165	0.0495	1.9000e-004	0.0173	1.5000e-004	0.0174	4.6300e-003	1.4000e-004	4.7700e-003	0.0000	17.5068	17.5068	8.5000e-004	0.0000	17.5281

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	10.00	10.00	0.00	45,864	45,864
Total	10.00	10.00	0.00	45,864	45,864

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
User Defined Industrial	14.70	6.60	6.60	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

5.0 Energy Detail

Historical Energy Use: N



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**5.2 Energy by Land Use - Natural Gas**

**Mitigated**

	Natural Gas 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					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	1.06985e+006	240.6430	9.7100e-003	1.9400e-003	241.4641
<b>Total</b>		<b>240.6430</b>	<b>9.7100e-003</b>	<b>1.9400e-003</b>	<b>241.4641</b>

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**5.3 Energy by Land Use - Electricity**

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	1.06985e+006	240.6430	9.7100e-003	1.9400e-003	241.4641
<b>Total</b>		<b>240.6430</b>	<b>9.7100e-003</b>	<b>1.9400e-003</b>	<b>241.4641</b>

**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	tons/yr										MT/yr					
Mitigated	0.0820	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Unmitigated	0.0820	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

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**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0188					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0633					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
<b>Total</b>	<b>0.0820</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>

**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	0.0188					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0633					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
<b>Total</b>	<b>0.0820</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.9996	4.0000e-005	1.0000e-005	1.0030
Unmitigated	0.9996	4.0000e-005	1.0000e-005	1.0030

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0.4	0.9996	4.0000e-005	1.0000e-005	1.0030
<b>Total</b>		<b>0.9996</b>	<b>4.0000e-005</b>	<b>1.0000e-005</b>	<b>1.0030</b>

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**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0.4	0.9996	4.0000e-005	1.0000e-005	1.0030
<b>Total</b>		<b>0.9996</b>	<b>4.0000e-005</b>	<b>1.0000e-005</b>	<b>1.0030</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**Category/Year**

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

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**8.2 Waste by Land Use**

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

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**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**

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