RK engineering group, inc.

traffic engineering ▪ transportation planning
acoustical engineering ▪ parking studies
air quality & greenhouse gas analysis

LETTER OF TRANSMITTAL

TO: SUMMERLAND SENIOR LIVING
10602 Trademark Parkway, Suite 509
Rancho Cucamonga, CA 91730

ATTN: Mr. Beau Cooper

DATE: January 17, 2017
JOB NO.: 2359-2016-04
SUBJECT: Summerland Senior Living
Air Quality and GHG Impact Analysis,
County of San Bernardino

WE ARE FORWARDING:

	By Messenger	X	By Email
	By Blueprinter		By Fedex

NUMBER OF COPIES	DESCRIPTION
1	PDF copy of report for your use

SENT FOR YOUR		STATUS		PLEASE NOTE	
	Approval		Preliminary		Revisions
	Signature		Revised		Additions
X	Use		Approved		Omissions
	File		Released		Corrections

REMARKS:
Attached please find the Summerland Senior Living Air Quality and GHG Impact Analysis, City of Chino.

Please call me at (949) 474-0809 extension 202 if you have any questions.

BY: Bryan Estrada

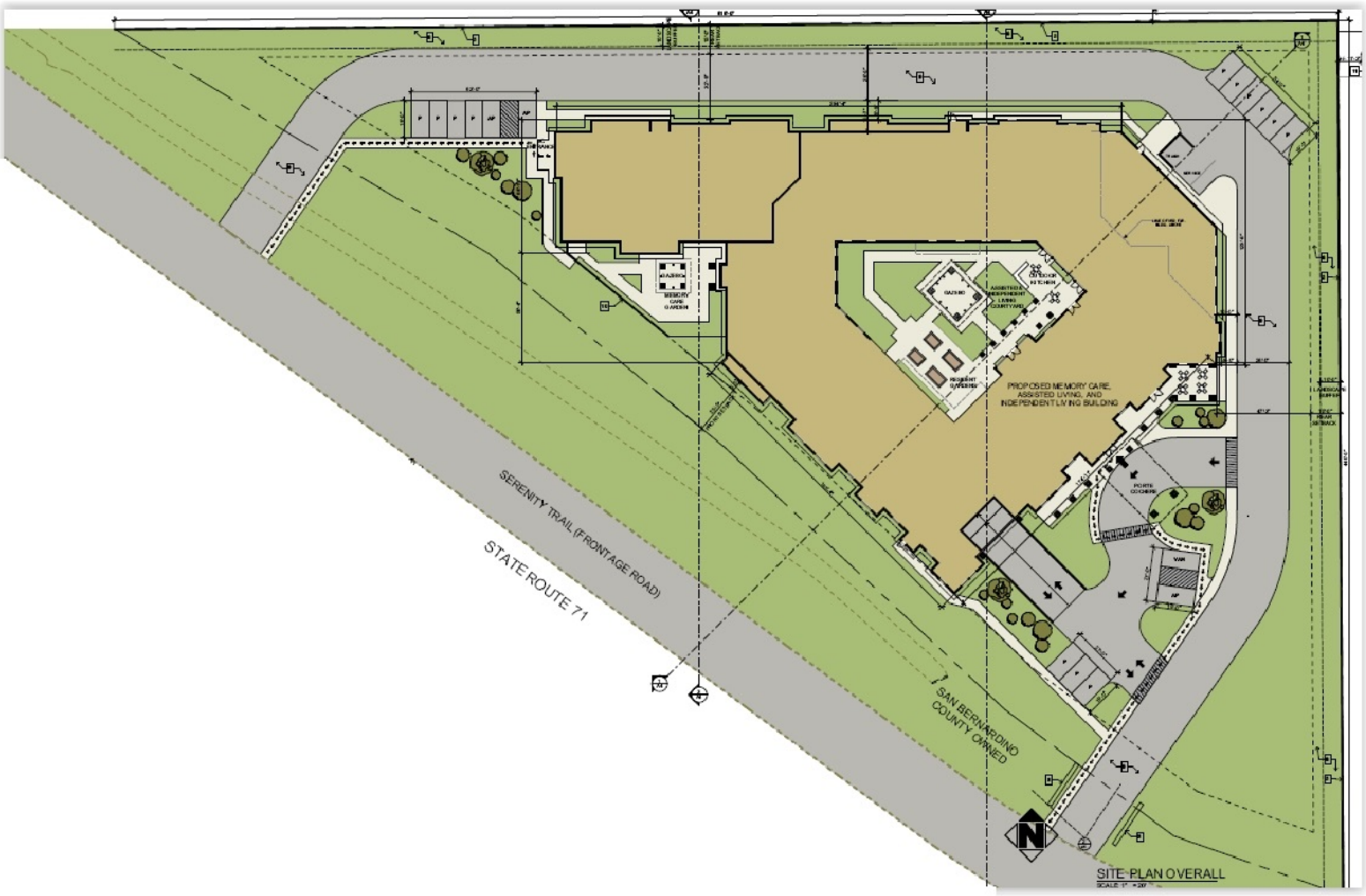
Bryan Estrada, PTP
Senior Transportation Planner

COPIES TO:

j:\rktables\RK12094TB.xls
JN:2359-2016-04

4000 westerly place, suite 280
newport beach, california 92660
tel 949.474.0809 fax 949.474.0902
www.rkengineer.com

SUMMERLAND SENIOR LIVING AIR QUALITY & GREENHOUSE GAS ANALYSIS
County of San Bernardino, California



RK engineering group, inc.

RK engineering group, inc.

traffic engineering ▪ transportation planning
acoustical engineering ▪ parking studies
air quality & greenhouse gas analysis

January 17, 2017

Mr. Beau Cooper
SUMMERLAND SENIOR LIVING
10602 Trademark Parkway, Suite 509
Rancho Cucamonga, CA 91730

Subject: Summerland Senior Living Air Quality & Greenhouse Gas Analysis, County of San Bernardino

Dear Mr. Cooper:

RK ENGINEERING GROUP, INC. (RK) has completed an air quality and greenhouse gas (GHG) analysis for the Summerland Senior Living Project. The project is located at 13225 Serenity Trail in the County of San Bernardino, as indicated in Exhibit A. The project will consist of 110-units of assisted living facility and will occupy a currently vacant 3.16 acre lot. Parking for the site will be provided via surface parking and a subterranean parking structure.

This report provides a summary of the findings, analysis procedures, and evaluation of the proposed project with respect to air quality emissions and greenhouse gases from the project site, pursuant to the State of California and South Coast Air Quality Management District requirements. The purpose of this analysis is to review the project design from an Air Quality / GHG standpoint, review criteria pollutant emissions, and determine the overall impact.

Based upon the analysis of the Air/GHG emissions, all study areas are anticipated to be below the criteria pollutant and GHG emission standards with the recommended mitigations.

RK Engineering Group, Inc. appreciates this opportunity to work with you on this project and looks forward to working with you on future projects. If you have any questions regarding this analysis, or would like further review, please do not hesitate to call us at (949) 474-0809.

Sincerely,
RK ENGINEERING GROUP, INC.

Bryan Estrada, PTP
Senior Transportation Planner
Attachments

BE:dt/RK12094.doc
JN:2359-2016-04

4000 westerly place, suite 280
newport beach, california 92660
tel 949.474.0809 fax 949.474.0902
www.rkengineer.com

SUMMERLAND SENIOR LIVING
AIR QUALITY AND GHG IMPACT ANALYSIS
County of San Bernardino, California

Prepared for:

SUMMERLAND SENIOR LIVING
10602 Trademark Parkway, Suite 509
Rancho Cucamonga, CA 91730

Prepared by:

RK ENGINEERING GROUP, INC.
4000 Westerly Place, Suite 280
Newport Beach, CA 92660

Bryan Estrada, P.T.P.

January 17, 2017

BE:dt/RK12094.doc
JN:2359-2016-04

Table of Contents

Table of Contents (continued)

List of Attachments

Exhibits

Tables

Appendices

1.0 Executive Summary

1.1 Purpose and Methods of Analysis

This air quality and greenhouse gas (GHG) analysis was prepared to evaluate whether the estimated criteria pollutants and GHG emissions generated from the project would cause a significant impact to air resources in the project area. This assessment was conducted within the context of the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000, et seq.). The assessment is consistent with the methodology and emission factors endorsed by the County of San Bernardino, the South Coast Air Quality Management District (SCAQMD), the California Air Resource Board (CARB), and the United States Environmental Protection Agency (US EPA).

1.2 Project Summary

1.2.1 Site Location

The proposed project is located at 13225 Serenity Trail in the County of San Bernardino, as indicated in Exhibit A. The project site is approximately 3.16 acres in size and is currently vacant. To the north and the east of the site are single family residences. The SR-71 is located to the west and south of the site. A 'Park-N-Ride' parking lot is located south of the site across from Chino Avenue. The land uses surrounding the project site include single residential (RS) to the north and east, and commercial general (CG) to the south. The topography is relatively flat and the elevation is approximately 725 feet above sea level.

1.2.2 Project Description

The project will construct a new three-story building with 110 units of assisted living on the currently vacant lot. Parking will be provided via 17 surface parking stalls and 37 parking stalls within a subterranean parking structure. A private roadway will provide access throughout the project site with a drop-off area on the west end of the project, adjacent to the parking structure entrance. The site plan used in this analysis was provided by UNITED ENGINEERING GROUP and is illustrated in Exhibit B. The land use assumptions used in this analysis are shown in Table 1.

The existing land use designation for the site is Single Family Residential and the proposed land use designation is General Commercial. The existing zoning is RS-1 and the proposed zoning is CG. The project will require a General Plan Amendment and Zone change.

Construction activities within the project area will consist of site preparation, on-site grading, building, paving, and architectural coating. The project is expected to export a net total of approximately 12,000 cubic yards of soil during the excavation of the parking structure and site grading. The land use assumptions used in this analysis are shown in Table 1.

1.2.3 Sensitive Receptors

Sensitive receptors are considered land uses or other types of population groups that are more sensitive to air pollution than others due to their exposure. Sensitive population groups include children, the elderly, the acutely and chronically ill, and those with cardio-respiratory diseases. For CEQA purposes, the SCAQMD, in its Localized Significance Threshold Methodology (SCAQMD 2008a, page 3-2), considers a sensitive receptor to be a location where a sensitive individual could remain for 24-hours or longer, such as residencies, hospitals, and schools (etc).

The nearest sensitive receptors are dwelling units located north and east of the site adjacent to the project.

1.3 Summary of Analysis Results

The following is a summary of the air quality analysis results, according to impact.

Impact AIR-1: The project would not conflict with or obstruct implementation of applicable air quality plans. **Less than significant with mitigation.**

Impact AIR-2: The Project would not violate an air quality standard or contribute substantially to an existing or projected air quality violation. **Less than significant with mitigation.**

Impact AIR-3: The Project will not result in a cumulatively considerable net increase of a criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors). **Construction: Less than significant with mitigation. Operation: Less than significant.**

Impact AIR-4: The Project would not expose sensitive receptors to substantial pollutant concentrations. **Less than significant with mitigation.**

Impact AIR-5: The Project would not create objectionable odors affecting a substantial number of people. Standard building code requirements for air filtration and exhaust systems will be implemented as part of the brewing process. **Less than significant.**

The following is a summary of the greenhouse gas analysis results, according to impact:

Impact GHG-1: The Project would generate direct and indirect greenhouse gas emissions; however, these emissions would not result in a significant impact on the environment. **Less than significant.**

Impact GHG-2: The Project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. **Less than significant.**

1.4 Mitigations Measures (MM) Applied to Project

Air Quality Impact Construction Measures

MM-1 Limit the amount of material imported or exported to the site to forty (40) truckloads per day or less during the site preparation and grading phase of construction.

Greenhouse Gas Operational Measures

The Project does not require GHG mitigation measures.

THIS PAGE INTENTIONALLY LEFT BLANK

2.0 Regulatory Framework and Background

2.1 Air Quality Regulatory Setting

This project is subject to several air pollutant control measures regulated at the national, state, and local air basin level. The United States Environmental Protection Agency (EPA) regulates at the national level. The California Air Resources Board (ARB) regulates at the state level. The South Coast Air Quality Management District (SCAQMD) regulates at the air basin level.

2.1.1 National and State

Both the federal government and the State of California have established health-based ambient air quality standards (AAQS) for seven air pollutants. As shown in Table 2, these pollutants include ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), coarse particulate matter with a diameter of 10 microns or less (PM_{10}), fine particulate matter with a diameter of 2.5 microns in diameter ($PM_{2.5}$), and lead. In addition the State has set standards for sulfates, hydrogen sulfides, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. The standards are divided into two categories, primary standards and secondary standards. Primary standards are implemented to provide protection for the "sensitive" populations such as those with asthma, or the children and elderly. Secondary standards are to provide protection against visible pollution as well as damage to the surrounding environment, including animals, crops, and buildings.

A State Implementation Plan is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain federal standards. The State Implementation Plan for the State of California is administered by the ARB, which has overall responsibility for statewide air quality maintenance and air pollution prevention. California's State Implementation Plan incorporates individual federal attainment plans for regional air districts—air district prepares their federal attainment plan, which sent to ARB to be approved and incorporated into the California State Implementation Plan. Federal attainment plans include the technical foundation for understanding air quality (e.g., emission inventories and air quality monitoring), control measures and strategies, and enforcement mechanisms.

Several pollutants listed in Table 2 are not addressed in this analysis. Analysis of lead is not included in this report because the Project is not anticipated to emit lead. Visibility-reducing particles are not explicitly addressed in this analysis because particulate matter is addressed. The Project is not expected to generate or be exposed to vinyl chloride because proposed Project uses do not utilize the chemical processes that create this pollutant and there are no such uses in the Project vicinity. The proposed Project is not expected to cause

exposure to hydrogen sulfide because it would not generate hydrogen sulfide in any substantial quantity.

In addition to setting out primary and secondary AAQS, the State has established a set of episode criteria for O_3, CO, NO_2, SO_2, and PM_{10}. These criteria refer to episode levels representing periods of short-term exposure to air pollutants that actually threaten public health, as required in the California Air Pollution Emergency Plan and Title 40 of the U.S. Code of Federal Regulations. Health effects are progressively more severe as pollutant levels increases from Stage One to Stage Three. An alert level is that concentration of pollutants at which initial stage control actions are to begin. An alert will be declared when any one of the pollutant concentrations can be expected to remain at these levels for 12 or more hours or to increase or, in the case of oxidants, the situation is likely to recur within the next 24 hours, unless control actions are taken.

Pollutant alert levels:

- O_3: 392 micrograms per cubic meter (μg/m3) (0.20 parts per million [ppm]), 1-hour average
- CO: 17 milligrams per cubic meter (mg/m3) (15 ppm), 8-hour average
- NO_2: 1,130 μg/m3 (0.6 ppm) 1-hour average; 282 μg/m3 (0.15 ppm) 24-hour average

2.1.2 South Coast Air Quality Management District

The agency for air pollution control for the South Coast Air Basin (basin) is the South Coast Air Quality Management District (SCAQMD). SCAQMD is responsible for controlling emissions primarily from stationary sources. SCAQMD maintains air quality monitoring stations throughout the basin. SCAQMD, in coordination with the Southern California Association of Governments, is also responsible for developing, updating, and implementing the Air Quality Management Plan (AQMP) for the basin. An AQMP is a plan prepared and implemented by an air pollution district for a county or region designated as nonattainment of the federal and/or California ambient air quality standards. The term nonattainment area is used to refer to an air basin where one or more ambient air quality standards are exceeded.

Every three (3) years the SCAQMD prepares a new AQMP, updating the previous plan and having a 20-year horizon.

On June 30, 2016, SCAQMD released the Draft 2016 AQMP. The 2016 AQMP represents a new approach, focusing on available, proven, and cost-effective alternatives to traditional strategies, while seeking to achieve multiple goals in partnership with other entities promoting reductions in greenhouse gases and toxic risk, as well as efficiencies in energy use, transportation, and goods movement. The Plan recognizes the critical importance of incentives that encourage the accelerated transition of vehicles, buildings, and industrial

facilities to cleaner technologies in a manner that benefits not only air quality, but also the local businesses and the regional economy. These "win-win" scenarios are key to implementation of this Plan with broad support from a wide range of stakeholders

South Coast Air Quality Management District Rules
The AQMP for the basin establishes a program of rules and regulations administered by SCAQMD to obtain attainment of the state and federal standards. The rules and regulations that apply to this Project include, but are not limited to, the following:

SCAQMD Rule 402 prohibits a person from discharging from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

SCAQMD Rule 403 governs emissions of fugitive dust during construction and operation activities. Compliance with this rule is achieved through application of standard Best Management Practices, such as application of water or chemical stabilizers to disturbed soils, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 miles per hour, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph, and establishing a permanent ground cover on finished sites.

SCAQMD Rule 1113 governs the sale, use, and manufacturing of architectural coating and limits the VOC content in paints and paint solvents. This rule regulates the VOC content of paints available during construction. Therefore, all paints and solvents used during construction and operation of project must comply with Rule 1113.

2.2 Greenhouse Gas Regulatory Setting

2.2.1 International

Many countries around the globe have made an effort to reduce GHGs since climate change is a global issue.

Intergovernmental Panel on Climate Change. In 1988, the United Nations and the World Meteorological Organization established the Intergovernmental Panel on Climate Change to assess the scientific, technical and socio-economic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation.

United Nations. The United States participates in the United Nations Framework Convention on Climate Change (UNFCCC) (signed on March 21, 1994). Under the Convention, governments gather and share information on greenhouse gas emissions,

national policies, and best practices; launch national strategies for addressing greenhouse gas emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change.

The 2014 UN Climate Change Conference in Lima Peru provided a unique opportunity to engage all countries to assess how developed countries are implementing actions to reduce emissions.

Kyoto Protocol. The Kyoto Protocol is a treaty made under the UNFCCC and was the first international agreement to regulate GHG emissions. It has been estimated that if the commitments outlined in the Kyoto Protocol are met, global GHG emissions could be reduced by an estimated 5 percent from 1990 levels during the first commitment period of 2008 – 2012 (UNFCCC 1997). On December 8, 2012, the Doha Amendment to the Kyoto Protocol was adopted. The amendment includes: New commitments for Annex I Parties to the Kyoto Protocol who agreed to take on commitments in a second commitment period from 2013 – 2020, a revised list of greenhouse gases (GHG) to be reported on by Parties in the second commitment period, and Amendments to several articles of the Kyoto Protocol, which specifically referenced issues pertaining to the first commitment period and which needed to be updated for the second commitment period.

The Paris Agreement. The Paris agreement is the first comprehensive global climate agreement to be ratified by the United States, United Nations, China, and India; the largest producers of greenhouse gas emissions in the world. The agreement was negotiated by a total of 195 nations, and entered into force on November 4, 2016. The central aim is to strengthen the global response to the threat of climate change by keeping the global temperature rise this century well below 2 degrees Celsius compared to pre-industrial levels, and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. Additionally, the agreement aims to strengthen the ability of countries to deal with the impacts of climate change. Currently 122 parties have ratified the agreement.

2.2.2 National

Greenhouse Gas Endangerment. On December 2, 2009, the EPA announced that GHGs threaten the public heath and welfare of the American people. The EPA also states that GHG emissions from on-road vehicles contribute to that threat. The decision was based on *Massachusetts v. EPA* (Supreme Court Case 05-1120) which argued that GHGs are air pollutants covered by the Clean Air Act and that the EPA has authority to regulate those emissions.

Clean Vehicles. Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light duty trucks. The law has become more stringent over time. On May 19, 2009, President Obama put in motion a new national

policy to increase fuel economy for all new cars and trucks sold in the United States. On April 1, 2010, the EPA and the Department of Transportation's National Highway Safety Administration announced a joint final rule establishing a national program that would reduce greenhouse gas emissions and improve fuel economy for new cars and trucks sold in the United States.

The first phase of the national program would apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. They require these vehicles to meet an estimated combined average emissions level of 250 grams of carbon dioxide per mile, equivalent to 35.5 miles per gallon if the automobile industry were to meet this carbon dioxide level solely through fuel economy improvements. Together, these standards would cut carbon dioxide emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012-2016). The second phase of the national program would involve proposing new fuel economy and greenhouse gas standards for model years 2017 – 2025 by September 1, 2011.

On October 25, 2010, the EPA and the U.S. Department of Transportation proposed the first national standards to reduce greenhouse gas emissions and improve fuel efficiency of heavy-duty trucks and buses. For combination tractors, the agencies are proposing engine and vehicle standards that begin in the 2014 model year and achieve up to a 20 percent reduction in carbon dioxide emissions and fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, the agencies are proposing separate gasoline and diesel truck standards, which phase in starting in the 2014 model year and achieve up to a 10 percent reduction for gasoline vehicles and 15 percent reduction for diesel vehicles by 2018 model year (12 and 17 percent respectively, if accounting for air conditioning leakage). Lastly, for vocational vehicles, the agencies are proposing engine and vehicle standards starting in the 2014 model year which would achieve up to a 10 percent reduction in fuel consumption and carbon dioxide emissions by 2018 model year.

Mandatory Reporting of Greenhouse Gases. On January 1, 2010, the EPA started requiring large emitters of heat-trapping emissions to begin collecting GHG data under a new reporting system. Under the rule, suppliers of fossil fuels or industrial greenhouse gases, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of greenhouse gas emissions are required to submit annual reports to the EPA.

Climate Adaption Plan. The EPA Plan identifies priority actions the Agency will take to incorporate considerations of climate change into its programs, policies, rules and operations to ensure they are effective under future climatic conditions. The Plan reflects input received from States, Tribes and municipal and county officials during development, as well as comments received during a formal Tribal consultation process and a 60 day public comment period during the Winter of 2013.

EPA is also releasing final Climate Change Adaptation Implementation Plans from its National Environmental Program Offices and all 10 Regional Offices. The Implementation

Plans, which also reflect responses to public comment, provide more detail on how EPA Programs and Regions will carry out the work called for in the agency wide Plan in partnership with states, tribes, and local governments.

2.2.3 California

Title 24. California Code of Regulations Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings, was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Currently, the 2013 Building Energy Efficiency Standards are applicable to all residential and non-residential buildings. The 2016 standards are effective January 1, 2017. . Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases greenhouse gas emissions.

California Green Building Standards. The California Green Building Standards Code is Part 11 of Title 24. The purpose of this code is to improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in the following categories: 1) planning and design, 2) energy efficiency, 3) water efficiency and conservation, 4) material conservation and resource efficiency, and 5) environmental quality.

The California Green Building Standards Code does not prevent a local jurisdiction from adopting a more stringent code as state law provides methods for local enhancements. The Code recognizes that many jurisdictions have developed existing construction and demolition ordinances, and defers to them as the ruling guidance provided they provide a minimum 50-percent diversion requirement. The code also provides exemptions for areas not served by construction and demolition recycling infrastructure. State building code provides the minimum standard which buildings need to meet in order to be certified for occupancy. Enforcement is generally through the local building official.

The California Green Building Standards Code (code section in parentheses) requires:

- **Short-term bicycle parking.** If a commercial project is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5 percent of visitor motorized vehicle parking capacity, with a minimum of one two-bike capacity rack (5.106.4.1).

- **Long-term bicycle parking.** For buildings with over 10 tenant-occupants, provide secure bicycle parking for 5 percent of tenant-occupied motorized vehicle parking capacity, with a minimum of one space (5.106.4.2).

- **Designated parking.** Provide designated parking in commercial projects for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles (5.106.5.2).

- **Recycling by Occupants.** Provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of nonhazardous materials for recycling.

- **Construction waste.** A minimum 50-percent diversion of construction and demolition waste from landfills, increasing voluntarily to 65 and-75 percent for new homes and 80-percent for commercial projects. All (100 percent) of trees, stumps, rocks and associated vegetation and soils resulting from land clearing shall be reused or recycled.

- **Wastewater reduction.** Each building shall reduce the generation of wastewater by one of the following methods:

    - The installation of water-conserving fixtures or
    - Utilizing nonpotable water systems (5.303.4).
    - Water use savings. 20-percent mandatory reduction in indoor water use with voluntary goal standards for 30, 35 and 40-percent reductions.
    - Water meters. Separate water meters for buildings in excess of 50,000 square feet or buildings projected to consume more than 1,000 gallons per day.
    - Irrigation efficiency. Moisture-sensing irrigation systems for larger landscaped areas.
    - Materials pollution control. Low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring, and particle board.
    - Building commissioning. Mandatory inspections of energy systems (i.e. heat furnace, air conditioner, mechanical equipment) for nonresidential buildings over 10,000 square feet to ensure that all are working at their maximum capacity according to their design efficiencies.

Pavley Regulations. California AB 1493, enacted on July 22, 2002, required the ARB to develop and adopt regulations that reduce greenhouse gases emitted by passenger vehicles and light duty trucks. The regulation was stalled by automaker lawsuits and by the EPA's denial of an implementation waiver. On January 21, 2009, the ARB requested that the EPA reconsider its previous waiver denial. On January 26, 2009, President Obama directed that the EPA assess whether the denial of the waiver was appropriate. On June 30, 2009, the EPA granted the waiver request.

The standards phase in during the 2009 through 2016 model years. When fully phased in, the near term (2009-2012) standards will result in about a 22-percent reduction compared with the 2002 fleet, and the mid-term (2013-2016) standards will result in about a 30-percent reduction. Several technologies stand out as providing significant reductions in emissions at favorable costs. These include discrete variable valve lift or camless valve actuation to optimize valve operation rather than relying on fixed valve timing and lift as

has historically been done; turbocharging to boost power and allow for engine downsizing; improved multi-speed transmissions; and improved air conditioning systems that operate optimally, leak less, and/or use an alternative refrigerant.

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

- By 2010, California shall reduce greenhouse gas emissions to 2000 levels;
- By 2020, California shall reduce greenhouse gas emissions to 1990 levels.
- By 2050, California shall reduce greenhouse gas emissions to 80% below 1990 levels.

The 2050 reduction goal represents what scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be an aggressive, but achievable, mid-term target. The Climate Action Team's Report to the Governor in 2006 contains recommendations and strategies to help ensure the 2020 targets in Executive Order S-3-05 are met.

Low Carbon Fuel Standard - Executive Order S-01-07. The Governor signed Executive Order S-01-07 on January 18, 2007. The order mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. In particular, the executive order established a Low Carbon Fuel Standard and directed the Secretary for Environmental Protection to coordinate the actions of the California Energy Commission, the ARB, the University of California, and other agencies to develop and propose protocols for measuring the "life-cycle carbon intensity" of transportation fuels. This analysis supporting development of the protocols was included in the State Implementation Plan for alternative fuels (State Alternative Fuels Plan adopted by California Energy Commission on December 24, 2007) and was submitted to ARB for consideration as an "early action" item under AB 32. The ARB adopted the Low Carbon Fuel Standard on April 23, 2009.

SB 1368. In 2006, the State Legislature adopted Senate Bill (SB) 1368, which was subsequently signed into law by the Governor. SB 1368 directs the California Public Utilities Commission to adopt a performance standard for greenhouse gas emissions for the future power purchases of California utilities. SB 1368 seeks to limit carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than 5 years from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant. Because of the carbon content of its fuel source, a coal-fired plant cannot meet this standard because such plants emit roughly twice as much carbon as natural gas, combined cycle plants. Accordingly, the new law will effectively prevent California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the State. Thus, SB 1368 will lead to dramatically lower greenhouse gas emissions associated with California's energy demand, as SB 1368 will effectively prohibit California utilities from purchasing power from

out-of-state producers that cannot satisfy the performance standard for greenhouse gas emissions required by SB 1368. The California Public Utilities Commission adopted the regulations required by SB 1368 on August 29, 2007.

SB 97 and the CEQA Guidelines Update. Passed in August 2007, SB 97 added Section 21083.05 to the Public Resources Code. The code states "(a) On or before July 1, 2009, the Office of Planning and Research shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption. (b) On or before January 1, 2010, the Resources Agency shall certify and adopt guidelines prepared and developed by the Office of Planning and Research pursuant to subdivision (a)." Section 21097 was also added to the Public Resources Code. It provided CEQA protection until January 1, 2010 for transportation projects funded by the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006 or projects funded by the Disaster Preparedness and Flood Prevention Bond Act of 2006, in stating that the failure to adequately analyze the effects of greenhouse gases would not violate CEQA.

On April 13, 2009, the Office of Planning and Research submitted to the Secretary for Natural Resources its recommended amendments to the CEQA Guidelines for addressing greenhouse gas emissions. On July 3, 2009, the Natural Resources Agency commenced the Administrative Procedure Act rulemaking process for certifying and adopting these amendments pursuant to Public Resources Code section 21083.05. Following a 55-day public comment period and two public hearings, the Natural Resources Agency proposed revisions to the text of the proposed Guidelines amendments. The Natural Resources Agency transmitted the adopted amendments and the entire rulemaking file to the Office of Administrative Law on December 31, 2009. On February 16, 2010, the Office of Administrative Law approved the Amendments, and filed them with the Secretary of State for inclusion in the California Code of Regulations. The Amendments became effective on March 18, 2010.

The CEQA Amendments provide guidance to public agencies regarding the analysis and mitigation of the effects of greenhouse gas emissions in CEQA documents. The CEQA Amendments fit within the existing CEQA framework by amending existing CEQA Guidelines to reference climate change.

A new section, CEQA Guidelines Section 15064.4, was added to assist agencies in determining the significance of greenhouse gas emissions. The new section allows agencies the discretion to determine whether a quantitative or qualitative analysis is best for a particular project. However, little guidance is offered on the crucial next step in this assessment process—how to determine whether the project's estimated greenhouse gas emissions are significant or cumulatively considerable.

Also amended were CEQA Guidelines Sections 15126.4 and 15130, which address mitigation measures and cumulative impacts respectively. Greenhouse gas mitigation

measures are referenced in general terms, but no specific measures are championed. The revision to the cumulative impact discussion requirement (Section 15130) simply directs agencies to analyze greenhouse gas emissions in an EIR when a project's incremental contribution of emissions may be cumulatively considerable, however it does not answer the question of when emissions are cumulatively considerable.

Section 15183.5 permits programmatic greenhouse gas analysis and later project-specific tiering, as well as the preparation of Greenhouse Gas Reduction Plans. Compliance with such plans can support a determination that a project's cumulative effect is not cumulatively considerable, according to proposed Section 15183.5(b). In addition, the amendments revised Appendix F of the CEQA Guidelines, which focuses on Energy Conservation. The sample environmental checklist in Appendix G was amended to include greenhouse gas questions.

AB 32. The California State Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires that greenhouse gases emitted in California be reduced to 1990 levels by the year 2020. "Greenhouse gases" as defined under AB 32 include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. ARB is the state agency charged with monitoring and regulating sources of greenhouse gases. AB 32 states the following:

Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.
The ARB Board approved the 1990 greenhouse gas emissions level of 427 million metric tons of carbon dioxide equivalent (MMTCO2e) on December 6, 2007 (California Air Resources Board 2007). Therefore, emissions generated in California in 2020 are required to be equal to or less than 427 MMTCO2e. Emissions in 2020 in a "business as usual" scenario are estimated to be 596 MMTCO2e.

Under AB 32, the ARB published its Final Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California. Discrete early action measures are currently underway or are enforceable by January 1, 2010. The ARB has 44 early action measures that apply to the transportation, commercial, forestry, agriculture, cement, oil and gas, fire suppression, fuels, education, energy efficiency, electricity, and waste sectors. Of these early action measures, nine are considered discrete early action measures, as they are regulatory and enforceable by January 1, 2010. The ARB estimates that the 44 recommendations are expected to result in reductions of at least 42 MMTCO2e by 2020, representing approximately 25 percent of the 2020 target.

The ARB's Climate Change Scoping Plan (Scoping Plan) contains measures designed to reduce the State's emissions to 1990 levels by the Year 2020 (California Air Resources Board 2008). The Scoping Plan identifies recommended measures for multiple greenhouse gas emission sectors and the associated emission reductions needed to achieve the year 2020 emissions target—each sector has a different emission reduction target. Most of the measures target the transportation and electricity sectors. As stated in the Scoping Plan, the key elements of the strategy for achieving the 2020 greenhouse gas target include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- Achieving a statewide renewables energy mix of 33 percent;
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system;
- Establishing targets for transportation-related greenhouse gas emissions for regions throughout California and pursuing policies and incentives to achieve those targets;
- 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; and
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State's long-term commitment to AB 32 implementation.

In addition, the Scoping Plan differentiates between "capped" and "uncapped" strategies. "Capped" strategies are subject to the proposed cap-and-trade program. The Scoping Plan states that the inclusion of these emissions within the cap-and trade program will help ensure that the year 2020 emission targets are met despite some degree of uncertainty in the emission reduction estimates for any individual measure. Implementation of the capped strategies is calculated to achieve a sufficient amount of reductions by 2020 to achieve the emission target contained in AB 32. "Uncapped" strategies that will not be subject to the cap-and-trade emissions caps and requirements are provided as a margin of safety by accounting for additional greenhouse gas emission reductions.

SB 375. Passing the Senate on August 30, 2008, SB 375 was signed by the Governor on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of greenhouse gas emissions, which emits over 40 percent of the total greenhouse gas emissions in California. SB 375 states, "Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32." SB 375 does the following: (1) requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing greenhouse gas emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies. Concerning CEQA, SB 375, section 21159.28 states that CEQA findings determinations for certain projects are not required to reference, describe, or discuss (1) growth inducing impacts or (2) any project-specific or

cumulative impacts from cars and light-duty truck trips generated by the project on global warming or the regional transportation network if the project:

1. Is in an area with an approved sustainable communities strategy or an alternative planning strategy that the ARB accepts as achieving the greenhouse gas emission reduction targets.
2. Is consistent with that strategy (in designation, density, building intensity, and applicable policies).
3. Incorporates the mitigation measures required by an applicable prior environmental document.

Executive Order S-13-08. Executive Order S-13-08 indicates that "climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California's economy, to the health and welfare of its population and to its natural resources." Pursuant to the requirements in the order, the 2009 California Climate Adaptation Strategy (California Natural Resources Agency 2009) was adopted, which is the " . . . first statewide, multi-sector, region-specific, and information-based climate change adaptation strategy in the United States." Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

Renewable Electricity Standards. On September 12, 2002, Governor Gray Davis signed SB 1078 requiring California to generate 20 percent of its electricity from renewable energy by 2017. SB 107 changed the due date to 2010 instead of 2017. On November 17, 2008, Governor Arnold Schwarzenegger signed Executive Order S-14-08, which established a Renewable Portfolio Standard target for California requiring that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. Governor Schwarzenegger also directed the ARB (Executive Order S-21¬09) to adopt a regulation by July 31, 2010, requiring the state's load serving entities to meet a 33 percent renewable energy target by 2020. The ARB Board approved the Renewable Electricity Standard on September 23, 2010 by Resolution 10-23.

Executive Order B-30-15. The California Air Resources Board is moving forward with a second update to the Scoping Plan to reflect the 2030 target established in Executive Order B-30-15. Governor Edmund G. Brown Jr. issued Executive Order B-30-15 on April 29, 2015 to establish a California greenhouse gas reduction target of 40 percent below 1990 levels by 2030.

2.2.4 South Coast Air Quality Management District

The Project is within the South Coast Air Basin, which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). SCAQMD Regulation XXVII currently includes three rules:

- The purpose of Rule 2700 is to define terms and post global warming potentials.
- The purpose of Rule 2701, SoCal Climate Solutions Exchange, is to establish a voluntary program to encourage, quantify, and certify voluntary, high quality certified greenhouse gas emission reductions in the SCAQMD.
- Rule 2702, Greenhouse Gas Reduction Program, was adopted on February 6, 2009. The purpose of this rule is to create a Greenhouse Gas Reduction Program for greenhouse gas emission reductions in the SCAQMD. The SCAQMD will fund projects through contracts in response to requests for proposals or purchase reductions from other parties.

SCAQMD Threshold Development

The SCAQMD has established recommended significance thresholds for greenhouse gases for local lead agency consideration ("SCAQMD draft local agency threshold"). SCAQMD has published a five-tiered draft GHG threshold which includes a 10,000 metric ton of CO_2e per year for stationary/industrial sources and 3,000 metric tons of CO_2e per year significance threshold for residential/commercial projects (South Coast Air Quality Management District 2010c). Tier 3 is anticipated to be the primary tier by which the SCAQMD will determine significance for projects. The Tier 3 screening level for stationary sources is based on an emission capture rate of 90 percent for all new or modified projects. A 90-precent emission capture rate means that 90 percent of total emissions from all new or modified stationary source projects would be subject to CEQA analysis. The 90-percent capture rate GHG significance screening level in Tier 3 for stationary sources was derived using the SCAQMD's annual Emissions Reporting Program.

The current draft thresholds consist of the following tiered approach:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.

- Tier 2 consists of determining whether or not the project is consistent with a greenhouse gas reduction plan. If a project is consistent with a qualifying local greenhouse gas reduction plan, it does not have significant greenhouse gas emissions.

- Tier 3 consists of screening values, which the lead agency can choose but must be consistent. A project's construction emissions are averaged over 30 years and are added to a project's operational emissions. If a project's emissions are under one of the following screening thresholds, then the project is less than significant:
  - All land use types: 3,000 MTCO2e per year
  - Based on land use types: residential is 3,500 MTCO2e per year; commercial is 1,400 MTCO2e per year; and mixed use is 3,000 MTCO2e per year

- Tier 4 has the following options:

- Option 1: Reduce emissions from business as usual by a certain percentage; this percentage is currently undefined
- Option 2: Early implementation of applicable AB 32 Scoping Plan measures
- Option 3: Year 2020 target for service populations (SP), which includes residents and employees: 4.8 MTCO2e/SP/year for projects and 6.6 MTCO2e/SP/year for plans;
- Option 3, 2035 target: 3.0 MTCO2e/SP/year for projects and 4.1 MTCO2e/SP/year for plans

- Tier 5 involves mitigation offsets to achieve target significance threshold.

2.2.5 County of San Bernardino

The County of San Bernardino has recently adopted a GHG Reduction Plan to establish goals and policies that incorporate environmental responsibility into the daily management of residential, commercial and industrial growth, education, energy, water use, air quality, transportation, waste reduction, economic development, and open space/natural habitat preservation. The CAP includes GHG inventories of community-wide and municipal sources based on the most recent data available for the year 2008. Sources of emissions include transportation, electricity and natural gas use, landscaping, water and wastewater pumping and treatment and treatment and decomposition of solid waste. San Bernardino County's 2008 inventory amounted to 17,487,636 MT CO2e community-wide. Following the state's adopted AB 32 GHG reduction target, San Bernardino County has set a goal to reduce emissions back to 1990 levels by the year 2020. This target was calculated as a 15% decrease from 2008 levels, as recommended in the AB 32 Scoping Plan. The estimated community-wide emissions for the year 2020, based on business as usual (BAU) population and housing growth projections associated with the assumptions used in the proposed General Plan Update, are 19,988,054 MT CO2e. In order to reach the reduction target, San Bernardino County has set reduction goals of 15% decrease from 2008 levels detailed for each city by the year 2020.

San Bernardino County has updated the Air Quality Element of the General Plan to include specific policies to address GHG emissions. The implementation mechanisms for these GHG-related policies are the Screening Tables for New Development. The Screening Tables allow new development projects a streamlined option for complying with the CEQA requirements for addressing GHG emissions. Additionally, San Bernardino County's Climate Action Plan details policies to reduce emissions from municipal and community-wide sources including emissions from existing buildings and new development. The screening tables are setup similar to a checklist with points allocated to certain elements that reduce greenhouse gas emissions; if the project garners 100 points (by including enough GHG-reducing elements), then the project is consistent with San Bernardino County's plan for reducing emissions.

3.0 Setting

3.1 Regional Setting

The Project is located in the County of San Bernardino and is within the South Coast Air Basin (basin). To the west of the basin is the Pacific Ocean, to the north and east of the basin are the San Gabriel, San Bernardino, and San Jacinto mountains, and the southern limit of the basin is the San Diego County line. The basin consists of Orange County, all of Los Angeles County, except for the Antelope Valley, the non-desert portion of western San Bernardino County, and the western and Coachella Valley portions of Riverside County. The air quality in the basin is impacted by dominant airflows, topography, atmospheric inversions, location, season, and time of day.

3.1.1 Local Climate and Meteorology

Dominant airflows provide the driving mechanism for transport and dispersion of air pollution. The mountains surrounding the region form natural horizontal barriers to the dispersion of air contaminants. Air pollution created in the coastal areas and around the Los Angeles area is transported inland until it reaches the mountains where the combination of mountains and inversion layers generally prevent further dispersion. This poor ventilation results in a gradual degradation of air quality from the coastal areas to inland areas. Air stagnation may occur during the early evening and early morning periods of transition between day and nighttime flows. The region also experiences periods of hot, dry winds from the desert, known as Santa Ana winds. If the Santa Ana winds are strong, they can surpass the sea breeze, which blows from the ocean to the land, and carry the suspended dust and pollutants out to the ocean. If the winds are weak, they are opposed by the sea breeze and cause stagnation, resulting in high pollution events.

The local dominant wind blows predominantly from the south-southwest with relatively low velocities. The annual average annual wind speed is about 10 mph. Summer wind speeds average slightly higher than winter wind speeds. Low average wind speeds, together with a persistent temperature inversion limit the vertical dispersion of air pollutants through out the basin.

The annual average temperature varies little throughout much of the basin, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). With more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas where the project site is located.

Temperature inversions are an important feature that limits the vertical depth through which pollution can be mixed. During the summer, coastal areas are characterized by a sharp discontinuity between the cool marine air at the surface and the warm, sinking air aloft within the high-pressure cell over the ocean to the west. This marine/subsidence inversion allows for good local mixing, but acts like a giant lid over the Basin. The air

remains stagnant, as the average wind speed in downtown Los Angeles becomes less than five mph. A second type of inversion forms on clear winter nights when cold air off the mountains to the south sinks to the valley floor while the air aloft over the valley remains warm. This forms radiation inversions. These inversions, in conjunction with calm winds, trap pollutants such as those from automobile exhaust near their source. They lead to air pollution "hotspots" in heavily developed coastal areas of the basin, although onshore breezes often push the pollutants along canyons into the inland valleys. Summers are often periods of hazy visibility and occasionally unhealthful air, while winter air quality impacts tend to be highly localized and can consist of elevated levels of nitrogen dioxide and fine particulate matter.

Pomona Fairplex Weather Station: The climatological station closest to the project site is a National Weather Service Cooperative weather station located at POMONA FAIRPLEX (ID: 047050). Climatological data from the National Weather Service at this station spanning the period 1893-2016 is summarized in Table 3. The average annual temperature of 62.6° Fahrenheit, with an average high temperature of 77.5° F and an average low temperature of 47.6°F. The average annual precipitation is 16.99 inches.

3.1.2 Local Air Quality

The local air quality can be evaluated by reviewing relevant air pollution concentrations near the project area. For evaluation purposes, the South Coast Air Quality Management District (SCAQMD) has divided the basin into 36 Source Receptor Areas (SRA) within the basin operating monitoring stations in most of the areas. These SRAs are designated to provide a general representation of the local meteorological, terrain, and air quality conditions within the particular geographical area.

The Project is within SRA 33, Southwest San Bernardino. Table 4 summarizes 2013 through 2015 published monitoring data, which is the most recent 3-year period available. The data shows that during the past few years, the Project area has exceeded the ozone, and PM_{10} standards.

3.1.3 Attainment Status

The EPA and the ARB designate air basins where ambient air quality standards are exceeded as "nonattainment" areas. If standards are met, the area is designated as an "attainment" area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered "unclassified." National nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards. Each standard has a different definition, or 'form' of what constitutes attainment, based on specific air quality statistics. For example, the Federal 8-hour CO standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring values exceeds the threshold per year. In contrast, the federal annual $PM_{2.5}$ standard is met if the

three-year average of the annual average $PM_{2.5}$ concentration is less than or equal to the standard.

When a state submits a request to the EPA to re-designate a nonattainment area to attainment, the Clean Air Act (CAA) section 175A(a) requires that the state (or states, if the area is a multi-state area) submit a maintenance plan ensuring the area can maintain the air quality standard for which the area is to be re-designated for at least 10 years following the effective date of re-designation.

Table 5 lists the attainment status for the criteria pollutants in the Basin.

3.2 Climate Change Setting

Climate change is a change in the average weather of the earth that is measured by alterations in temperature, wind patterns, storms, and precipitation. These changes are assessed using historical records of temperature changes occurring in the past, such as during previous ice ages. The historical data is utilized to extrapolate a level of statistical significance specifically focusing on temperature records from the last 150 years.

The United Nations Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. The IPPC concluded that global average temperatures and sea levels are expected to rise under all analytical scenarios (Intergovernmental Panel on Climate Change 2007a). The report also concluded that "warming of the climate system is unequivocal," and that "most of the observed increase in global average temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic greenhouse gas concentrations."

Many question the validity of the IPCC's report by claiming the inadequacy of the peer review process. Audits have concluded that 48 percent of the chapters in the Fourth Assessment Report received a grade of "F", meaning that 59 percent or fewer of the sources were peer reviewed (NoConsensus.org 2010).

Consequences of Climate Change in California

In California, climate change may result in consequences such as the following (from California Climate Change Center 2006 and Moser et al. 2010).

- A rise in sea levels resulting in displacement of costal businesses and residencies. During the past century, sea levels along California's coast have risen about seven inches. If emissions continue unabated and temperatures rise into the higher anticipated warming range, sea level is expected to rise an additional 22 to 55 inches by the end of the century.

- A reduction in the quality and supply of water from the Sierra snowpack. If heat-trapping emissions continue unabated, more precipitation will fall as rain instead of snow, and the snow that does fall will melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90 percent. This can lead to challenges in securing adequate water supplies. It can also lead to a potential reduction in hydropower.

- Increased risk of large wildfires. If rain increases as temperatures rise, wildfires in the grasslands and chaparral ecosystems of southern California are estimated to increase by approximately 30 percent toward the end of the 21st century because more winter rain will stimulate the growth of more plant "fuel" available to burn in the fall. In contrast, a hotter, drier climate could promote up to 90 percent more northern California fires by the end of the century by drying out and increasing the flammability of forest vegetation.

- Reductions in the quality and quantity of certain agricultural products. The crops and products likely to be adversely affected include wine grapes, fruit, nuts, and milk.

- Exacerbation of air quality problems. If temperatures rise to the medium warming range, there could be 75 to 85 percent more days with weather conducive to ozone formation in Los Angeles and the San Joaquin Valley, relative to today's conditions. This is more than twice the increase expected if rising temperatures remain in the lower warming range. This increase in air quality problems could result in an increase in asthma and other health-related problems.

- An increase temperature and extreme weather events. Climate change is expected to lead to increases in the frequency, intensity, and duration of extreme heat events and heat waves in California. More heat waves can exacerbate chronic disease or heat-related illness.

- A decrease in the health and productivity of California's forests. Climate change can cause an increase in wildfires, an enhanced insect population, and establishment of non-native species.

3.3 Greenhouse Gases

Gases that trap heat in the atmosphere are commonly referred to as "greenhouse gases" because they function like a greenhouse by letting light in while preventing heat from escaping. Naturally occurring GHGs include water vapor, carbon dioxide (CO_2) methane (CH_4) and nitrogen dioxide/oxides (N_2O and NO_x). The natural accumulation of GHGs in the atmosphere has a warming effect on the Earth's temperature. Without these natural GHGs, the Earths temperature would be cooler.

In addition to the naturally occurring gases, man-made chemicals also act as GHGs and include the following common compounds: chlorofluorocarbons (CFCs),

hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), ozone (O_3), and aerosols. It is believed that emissions from human activities, such as electricity production and vehicle use, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations.

Climate change is driven by forcings and feedbacks. Radiative forcing is the difference between the incoming energy and outgoing energy in the climate system. Positive forcing tends to warm the surface while negative forcing tends to cool it. Radiative forcing values are typically expressed in watts per square meter. A feedback is a climate process that can strengthen or weaken a forcing. For example, when ice or snow melts, it reveals darker land underneath which absorbs more radiation and causes more warming. The global warming potential is the potential of a gas or aerosol to trap heat in the atmosphere. The global warming potential of a gas is essentially a measurement of the radiative forcing of a greenhouse gas compared with the reference gas, carbon dioxide.

Individual greenhouse gas compounds have varying global warming potential and atmospheric lifetimes. Carbon dioxide (CO_2), the reference gas for global warming potential, has a global warming potential of one. The global warming potential of a greenhouse gas is a measure of how much a given mass of a greenhouse gas is estimated to contribute to global warming. To describe how much global warming a given type and amount of greenhouse gas may cause, the carbon dioxide equivalent (CO_2 e) is used. The calculation of the carbon dioxide equivalent is a consistent methodology for comparing greenhouse gas emissions since it normalizes various greenhouse gas emissions to a consistent reference gas, carbon dioxide. For example, methane's warming potential of 21 indicates that methane has 21 times greater warming affect than carbon dioxide on a molecule per molecule basis. A carbon dioxide equivalent is the mass emissions of an individual greenhouse gas multiplied by its global warming potential. Greenhouse gases defined by AB 32 include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. They are described in Table 6.

In 2014, the US EPA amended the global warming potentials (GWPs) to be consistent with IPCC for methane and nitrous oxide 25 and 298, respectively (IPCC 4th Assessment 100-yr GWPs at: https://www.ipcc.ch/publications_and_data/ar4/wg1/en/ch2s2-10-2.html). Since the CalEEMod GHG emissions are based on the old GWP, this change has not been addressed addressed quantitatively.

Emissions Inventories

Emissions in California were approximately 450 million tons of carbon dioxide equivalents (MMTCO2e) in 2009 (California Air Resources Board).

3.4 Greenhouse Gas Inventory

This analysis is restricted to greenhouse gases identified by AB 32 and the CEQA Guidelines (section 15364.5), which include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. The Project would generate a variety of greenhouse gases during construction and operation, including several defined by AB 32 and the CEQA Guidelines such as carbon dioxide, methane and nitrous oxide.

The Project may also emit greenhouse gases that are not defined by AB 32 and the CEQA Guidelines. For example, the project may generate aerosols. During construction, the diesel fueled vehicles and equipment emit diesel particulate matter, which has black carbon, which is a component of aerosol. During operation, any diesel fueled trucks or vehicles could emit aerosols. Aerosols are short-lived particles, as they remain in the atmosphere for about one week. Studies have indicated that black carbon has a high global warming potential; however, the Intergovernmental Panel on Climate Change states that it has a low level of scientific certainty (Intergovernmental Panel on Climate Change 2007a).

Water vapor could be emitted from evaporated water used for landscaping, but this is not a significant impact, because water vapor concentrations in the upper atmosphere are primarily due to climate feedbacks rather than emissions from project-related activities. The project would emit nitrogen oxides and volatile organic compounds, which are ozone precursors. Ozone is a greenhouse gas, however, unlike the other greenhouse gases, ozone in the troposphere is relatively short-lived and can be reduced in the troposphere on a daily basis. Stratospheric ozone can be reduced through reactions with other pollutants.

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

An upstream emission source (also known as life cycle emissions) refers to emissions that were generated during the manufacture of products to be used for construction of the project. Upstream emission sources for the project include but are not limited emissions from the manufacture of cement, emissions from the manufacture of steel, and/or emissions from the transportation of building materials to the seller. The upstream emissions were not estimated because they are not within the control of the project and to do so would be speculative at this time. Additionally, the California Air Pollution Control Officers Association White Paper on CEQA and Climate Change supports this conclusion by stating, "The full life-cycle of GHG [greenhouse gas] emissions from construction activities is not accounted for . . . and the information needed to characterize [life-cycle emissions] would be speculative at the CEQA analysis level" (California Air Pollution Control Officers Association 2008). Therefore, pursuant to CEQA Guidelines Sections 15144 and 15145, upstream / life cycle emissions are speculative and no further discussion is necessary.

4.0 Modeling Parameters and Assumptions

4.1 Construction

Emissions were estimated using the California Emissions Estimator Model Version 2016.3.1 (CalEEMod), which was released in October 2016. The analysis reflects the construction of a new three-story 110-unit assisted living facility. The project will be developed on a 3.16 acre site. The parking area will provide 17 surface parking stalls and an enclosed subterranean parking structure with 37 parking stalls and an elevator. Approximately 16,000 cubic yards of soil will be removed, and 4,000 cubic yards of soil will be imported during site preparation and grading. Construction emissions are estimated based on model Year 2018 and beyond. It was assumed that construction would begin in the Year 2017 and would last approximately 1 year. The project's construction schedule follows the CalEEMod's default for building construction, paving and coating phases with adjustments made to the site preparation and grading phases to allow for additional time for the import and export of materials. The assessment assumes that construction phases will not overlap. The CalEEMod default construction equipment and worker and vendor trips and trip lengths are utilized.

The default construction equipment assumptions were used in CalEEMod and are shown in Table 7.

The quantity of fugitive dust estimated by CalEEMod is based on the number of equipment used during grading. Tractors, graders, and dozers would impact 1.0 acres per 8-hour day if all were used simultaneously.

SCAQMD Rule 403 requires fugitive dust generating activities follow best available control measures to reduce emissions of fugitive dust. These measures are reported as mitigation in CalEEMod, however all construction activities will conform with SCAQMD fugitive dust requirements and therefore the measures are actually considered project design features.

Per SCAQMD Rule 1113 as amended on June 3, 2011, the architectural coatings that would be applied after January 1, 2014 will be limited to an average of 50 grams per liter or less and the CalEEMod model default VOC emissions have been adjusted accordingly.

4.2 Operations

Operational or long-term emissions occur over the life of the Project. Both mobile and area sources generate operational emissions. Mobile source emissions from motor vehicles are the largest single long-term source of air pollutants from the operation of the Project and consist of emissions from visitors' vehicles. Area source emissions arise from consumer product usage, heaters that consume natural gas, gasoline-powered landscape equipment, gasoline service station, and architectural coatings (painting). Small amounts of emissions

would also occur from area sources such as the consumption of natural gas for heating, hearths, from landscaping emissions, and consumer product usage.

4.2.1 Motor Vehicle Emissions

Estimates of motor vehicle emissions require information on four parameters: trip generation, mix of vehicles accessing the Project (i.e., car versus type of truck), length of each trip made by each type of vehicle, and emission factor (quantity of emission for each mile traveled or time spent idling by each vehicle). Each of these parameters is discussed below.

Home, Work, Shop, and Other Trips

The trip generation rates are referenced from the Institute of Transportation Engineers (ITE) Trip Generation Manual 9th Edition and are shown in Table 8. Trips rates have been converted to reflect trips per dwelling unit instead of trips per bed for purposes of modeling project in CalEEMod.The percentages for work, shop, and other trips are from the CalEEMod defaults. The estimated vehicle mix is shown in Table 9. A summary of the default operational vehicle trip types and distances from CalEEMod are demonstrated in Table 10.

Emission Factors

The emission factors (from EMFAC2014) required to estimate the mobile source emissions are embedded in the CalEEMod emissions model.

4.2.2 Other Emissions

Natural Gas. Natural gas emissions refer to the emissions that occur when natural gas is combusted on the project site for heating water, space heating, stoves, or other uses. Criteria air pollutant and greenhouse gas emissions were estimated using CalEEMod defaults.

Indirect Electricity. Indirect electricity refers to the greenhouse gas emissions generated by offsite power plants to supply the electricity required for the project. The CalEEMod defaults for energy intensity were used.

Water Transport. There would be greenhouse gas emissions generated from the electricity required to supply and treat the water to be used on the project site. The Project would use an estimated 11,685,233 gallons of water per year, as shown in Table 11.

Waste. There would be greenhouse gas emissions from the decomposing waste generated by the project. The CalEEMod default estimates the Project would generate 100.38 tons per year, as shown in Table 11.

4.3 Localized Construction Analysis Modeling Parameters

The SCAQMD has published a "Fact Sheet for Applying CalEEMod to Localized Significance Thresholds" (South Coast Air Quality Management District 2011b). CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily disturbance activity possible for each piece of equipment. In order to compare CalEEMod reported emissions against the localized significance threshold lookup tables, the CEQA document should contain in its project design features or its mitigation measures the following parameters:

1) The off-road equipment list (including type of equipment, horsepower, and hours of operation) assumed for the day of construction activity with maximum emissions.

2) The maximum number of acres disturbed on the peak day.

3) Any emission control devices added onto off-road equipment.

4) Specific dust suppression techniques used on the day of construction activity with maximum emissions.

The local air quality emissions from construction were analyzed using the SCAQMD's Mass Rate Localized Significant Threshold Look-up Tables and the methodology described in Localized Significance Threshold Methodology, prepared by SCAQMD, revised July 2008. The Look-up Tables were developed by the SCAQMD in order to readily determine if the daily emissions of CO, NOx, PM10, and PM2.5 from the proposed project could result in a significant impact to the local air quality. These look-up tables were utilized to determine localized significance. The construction emissions were compared to the SCAQMD's threshold tables with a disturbance area of 5 acres.

Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to adverse air quality. The nearest sensitive receptors in the project vicinity would include residential units located approximately 25 meters to the north and east.

A review of the CalEEMod model outputs indicated that the highest emissions generated from onsite construction activities are associated with the site preparation and grading of the project site. Therefore, site prep emissions during this construction activity were evaluated in the localized assessment.

4.4 Localized Operational Analysis Modeling Parameters

For operational emissions, the screening tables for a disturbance area of 5 acres were utilized to determine significance. Localized operational emissions were analyzed at a distance of 25 meters in order to demonstrate that the project will comply with the most stringent localized thresholds. The screening tables were compared to the project's operational emissions.

5.0 Thresholds of Significance

5.1 Air Quality Thresholds of Significance

5.1.1 CEQA Guidelines for Air Quality

The CEQA Guidelines define a significant effect on the environment as "a substantial, or potentially substantial, adverse change in the environment." To determine if a project would have a significant impact on air quality, the type, level, and impact of emissions generated by the Project must be evaluated.

The following air quality significance thresholds are contained in Appendix G of the CEQA Guidelines. A significant impact would occur if the Project would:

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

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation;

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable national or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);

d) Expose sensitive receptors to substantial pollutant concentrations; or

e) Create objectionable odors affecting a substantial number of people.

While the final determination of whether a project is significant is within the purview of the Lead Agency pursuant to Section 15064(b) of the CEQA Guidelines, SCAQMD recommends that its quantitative air pollution thresholds be used to determine the significance of project emissions. If the Lead Agency finds that the project has the potential to exceed these air pollution thresholds, the project should be considered to have significant air quality impacts. There are daily emission thresholds for construction and operation of a proposed project in the basin.

5.1.2 Regional Significance Thresholds for Construction Emissions

The following CEQA significance thresholds for construction emissions are established for the Basin:

- 75 pounds per day (lbs/day) of VOC
- 100 lbs/day of NO_x
- 550 lbs/day of CO
- 150 lbs/day of PM_{10}
- 55 lbs/day of $PM_{2.5}$
- 150 lbs/day of SO_2

Projects in the basin with construction-related emissions that exceed any of the emission thresholds are considered to be significant under SCAQMD guidelines.

5.1.3 Regional Significance Thresholds for Operational Emissions

The daily operational emissions significance thresholds for the basin are as follows:

- 55 pounds per day (lbs/day) of VOC
- 55 lbs/day of NO_x
- 550 lbs/day of CO
- 150 lbs/day of PM_{10}
- 55 lbs/day of $PM_{2.5}$
- 150 lbs/day of SO_2

Local Microscale Concentration Standards The significance of localized project impacts under CEQA depends on whether ambient CO levels in the vicinity of the project are above or below State and federal CO standards. If ambient levels are below the standards, a project is considered to have a significant impact if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a State or federal standard, project emissions are considered significant if they increase 1-hour CO concentrations by 1.0 ppm or more or 8-hour CO concentrations by 0.45 ppm or more. The following are applicable local emission concentration standards for CO:

- California State 1-hour CO standard of 20.0 ppm
- California State 8-hour CO standard of 9.0 ppm

5.1.4 Thresholds for Localized Significance

LSTs represent the maximum emissions from a project site that is not expected to result in an exceedance of the national or state AAQS. LSTs are based on the ambient concentrations of that pollutant within the project source receptor area (SRA) and the distance to the nearest sensitive receptor. For this project, the appropriate SRA for the LST is the SOUTHWEST SAN BERNARDINO VALLEY area.

In the case of CO and NO_2, if ambient levels are below the standards, a project is considered to have a significant impact if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a State or federal standard, then project emissions are considered significant if they increase ambient concentrations by a measurable amount. This would apply to PM_{10} which is a non-attainment pollutant. For this pollutant, the significance criterion is the pollutant concentration thresholds presented in SCAQMD Rules 403. The Rule 403 threshold of 10.4 micrograms per cubic meter applies to construction emissions (and may apply to operational emissions at aggregate handling facilities).

Construction LSTs are assessed with the SCAQMD screening thresholds. Construction thresholds for a 5-acre site in Southwest San Bernardino Valley (SRA 33) at 25 meters were utilized:

- 2,193 lbs/day of CO
- 270 lbs/day of NO_X
- 16 lbs/day of PM_{10}
- 9 lbs/day of $PM_{2.5}$

Operational LSTs are assessed with the SCAQMD screening thresholds. Operational thresholds for a 5-acre site in Southwest San Bernardino Valley (SRA 33) at 25 meters were utilized:

- 2,193 lbs/day of CO
- 270 lbs/day of NO_X
- 4 lbs/day of PM_{10}
- 2 lbs/day of $PM_{2.5}$

5.2 Greenhouse Gas Thresholds of Significance

5.2.1 CEQA Guidelines for Greenhouse Gas

CEQA Guidelines define a significant effect on the environment as "a substantial, or potentially substantial, adverse change in the environment." To determine if a project would have a significant impact on greenhouse gases, the type, level, and impact of emissions generated by the project must be evaluated.

The following greenhouse gas significance thresholds are contained in Appendix G of the CEQA Guidelines, which were amendments adopted into the Guidelines on March 18, 2010, pursuant to SB 97. A significant impact would occur if the project would:

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

(b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

5.2.2 SCAQMD Interim Significance Thresholds

In addition to CEQA guidelines, the SCAQMD established working group to develop an interim significance threshold for GHG emissions under CEQA as discussed in Section 3.4.1. This analysis compares the Project's GHG emissions to the SCAQMD's Tier 3 approach.

THIS PAGE INTENTIONALLY LEFT BLANK

6.0 Air Quality Impact Analysis

6.1 Construction Air Quality Emissions Impact

6.1.1 Regional Construction Emissions

CalEEMod default inputs were used to estimate onsite and offsite construction emissions as shown in Table 12A.Table 12A shows the estimate emissions before mitigations are applied to the project. To meet the SCAQMD thresholds, it is recommended that the amount of material imported or exported from the site during the site preparation and grading phases is limited to forty (40) truckloads per day or less. The mitigated regional construction emissions are shown in Table 12B.Emissions incorporate Rule 1113 (use of low VOC paint) and Rule 403 (fugitive dust) during construction. The construction related air emissions will not exceed the SCAQMD's regional emission thresholds with the recommended mitigation measures. **Therefore, the project will have a less than significant impact with mitigation.**

6.1.2 Localized Construction Emissions

Table 13 illustrates the construction related LSTs for the project area. The emissions will be below the SCAQMD thresholds of significance for localized construction emissions. **Therefore, the Project will result in a less than significant localized construction emissions impact.**

6.1.3 Fugitive Dust

Fugitive dust emissions are generally associated with land clearing and exposure of soils to the air and wind, and cut-and-fill grading operations. Dust generated during construction varies substantially on a project-by-project basis, depending on the level of activity, the specific operations, and weather conditions at the time of construction.

Construction emissions can vary greatly depending on the level of activity, the specific operations taking place, the equipment being operated, local soils, weather conditions, and other factors. The proposed Project will be required to comply with SCAQMD Rules 402 and 403 to control fugitive dust. Table 13 illustrates total construction emissions, i.e., fugitive-dust emissions and construction equipment exhausts that have incorporated a number of feasible control measures that can be reasonably implemented to significantly reduce PM_{10} emissions from construction. Table 13 illustrates that all construction phases, the daily total construction emissions with standard control measures would be below the daily thresholds established by the SCAQMD. **Therefore, the Project will result in less than significant Fugitive Dust emissions.**

6.1.4 Odors

Heavy-duty equipment in the Project area during construction will emit odors; however, the construction activity would cease to occur after individual construction is completed. **The Project will result in less than significant odor impacts during construction.**

6.1.5 Naturally Occurring Asbestos

The proposed Project is located in San Bernardino County which is not among the counties that are found to have serpentine and ultramafic rock in their soils. **Therefore, the potential risk for naturally occurring asbestos (NOA) during project construction is small and less than significant.**

6.1.6 Construction-Related Toxic Air Contaminant Impact

The greatest potential for toxic air contaminant emissions would be related to diesel particulate emissions associated with heavy equipment operations during construction of the proposed project. The Office of Environmental Health Hazard Assessment (OEHHA) has issued the Air Toxic Hot Spots Program Risk Assessment Guidelines and Guidance Manual for the Preparation of Health Risk Assessments, February 2015 to provide a description of the algorithms, recommended exposure variates, cancer and noncancer health values, and the air modeling protocols needed to perform a health risk assessment (HRA) under the Air Toxics Hot Spots Information and Assessment Act of 1987. All substances that are evaluated for cancer risk and/or noncancer acute, 8-hour, and chronic health impacts. In addition, identify any multipathway substances that present a cancer risk or chronic noncancer hazard via noninhalation routes of exposure

Given the relatively limited number of heavy-duty construction equipment and the short-term construction schedule, the proposed project would not result in a long-term substantial source of toxic air contaminant emissions and corresponding individual cancer risk. **Therefore, no significant short-term toxic air contaminant impacts would occur during construction of the proposed project.**

The local Air Pollution Control District shall have final responsibility in determining which facilities will prepare an HRA.

6.2 Operational Air Quality Emissions Impact

6.2.1 Regional Operational Emissions

Long-term air pollutant emission impacts are those associated with stationary sources and mobile sources involving any project-related changes. The stationary source emissions

would come from additional natural gas consumption for on-site buildings and electricity for the lighting in the buildings and at the parking area. Based on trip generation factors included in the traffic study and in the Institute of Transportation Engineers' (ITE) Trip Generation Manual, Ninth Edition, long-term operational emissions associated with the proposed Project, calculated with the CalEEMod model, are shown in Table 14. Area sources include architectural coatings, consumer products, and landscaping. Energy sources include natural gas consumption for heating.

Table 14 shows that the increase of all criteria pollutants as a result of the proposed Project is below the SCAQMD daily emission thresholds. **Therefore, the Project will result in less than significant Regional Operational emissions.**

6.2.2 Localized Operational Emissions

Table 15 shows the calculated emissions for the proposed operational activities compared with appropriate LSTs. The LST analysis only includes on-site sources; however, the CalEEMod software outputs do not separate on-site and off-site emissions for mobile sources. For a worst-case scenario assessment, the emissions shown in Table 15 include all on-site project-related stationary sources and 5% of the project-related new mobile sources. This percentage is an estimate of the amount of project-related new vehicle traffic that will occur on-site.

Table 15 indicates that the operational emission rates would not exceed the Localized Significance Thresholds for the nearest sensitive receptors at 25 meters. **Therefore, the Project will result in less than significant Localized Operational emissions.**

6.2.2 Operational Odors

The proposed assisted living facility may emit odors during operations. However, standard building shell design, air duct filters and exhaust systems that will be required as part of the building code requirements and would reasonably suppress any potentially objectionable odors. No significant sources of objectionable odors have been identified for the proposed Project. **The Project will result in less than significant odor impacts.**

6.3 CO Hot Spot Emissions

The SCAQMD recommends that a local CO hot spot analysis be conducted if the intersection meets one of the following criteria: 1) the intersection is at level of service (LOS) D or worse and where the project increases the volume to capacity ratio by 2 percent, or 2) the project decrease at an intersection from C to D.

Micro-scale air quality emissions have traditionally been analyzed in environmental documents where the air basin was a non-attainment area for CO. However, the SCAQMD has demonstrated in the CO attainment redesignation request to EPA that there are no

"hot spots" anywhere in the air basin, even at intersections with much higher volumes, much worse congestion, and much higher background CO levels than anywhere in San Bernardino County. If the worst-case intersections in the air basin have no "hot spot" potential, it is assumed that local impacts will be below thresholds.

6.4 Air Quality Management Plan Consistency

An AQMP describes air pollution control strategies to be taken by a City, County, or Region classified as a nonattainment area. The main purpose of an AQMP is to bring the area into compliance with Federal and State air quality standards. CEQA requires that certain proposed projects be analyzed for consistency with the AQMP. For a project to be consistent with the AQMP adopted by the SCAQMD, the pollutants emitted from the project should not exceed the SCAQMD daily threshold or cause a significant impact on air quality, or the project must already have been included in the AQMP projection. However, if feasible mitigation measures are implemented and shown to reduce the impact level from significant to less than significant, a project may be deemed consistent with the AQMP. The AQMP uses the assumptions and projections of local planning agencies to determine control strategies for regional compliance status. Since the AQMP is based on the local General Plan, projects that are deemed consistent with the General Plan are found to be consistent with the AQMP.

The proposed Project would accommodate the growth that has been projected for the project vicinity and sub-region through the construction of needed infrastructure, thus removing an impediment to growth within the project area. Emissions projections used to establish SCAQMD attainment objectives reflect adopted regional and local land use plans. Therefore, the emissions associated with the proposed Project are within the amounts already accounted for in the AQMP, and no significant inconsistency with the AQMP would occur.

7.0 Greenhouse Gas Impact Analysis

7.1 Construction Greenhouse Gas Emissions Impact

CalEEMod was used to estimate onsite and offsite emissions. For assumptions used in estimating these emissions, please refer to Section 4.1. Greenhouse gas emissions from Project construction equipment and worker vehicle emissions are shown in Table 16. The emissions are from all phases of construction. The total construction emissions amortized over a period of 30 years are estimated at 13.06 metric tons of CO_2e per year. CalEEMod output calculations are provided in Appendix B.

7.2 Operational Greenhouse Gas Emissions Impact

Operational or long-term emissions occur over the life of the project. For assumptions used in estimating the emissions and details regarding the emissions, please refer to Section 4.2. The operational emissions for the Project are 1,043 metric tons of CO_2e per year as shown in Table 17. The emissions refer to emissions with the incorporation of regulations that would further reduce emissions. Table 18 compares the Project emissions to the SCAQMD's significance thresholds.

The Project's operational GHG emissions are below the SCAQMD's significance threshold. Therefore, the Project will not result in significant GHG emissions.

The analysis does not include changes in carbon storage or sequestration. Carbon is stored in biological material such as trees and lumber. There is little vegetation on the project site of this specific type, although landscaping will be provided. In addition, the structures that will be operational once the project is constructed will retain carbon. Therefore, the carbon sequestration ability of the Project site pre and post project is speculative at this time.

7.3 Conflict with an Applicable Plan, Policy or Regulation for the Purpose of Reducing the Emissions of Greenhouse Gases

The Project will promote the goals of AB 32 and the County's Climate Action Plan and meets the requirements of the San Bernardino GHG Reduction Plan. The Project site location is positioned within the County's development area. The Project incorporates a number of features that would minimize greenhouse gas emissions. Emission levels are within the allowable limits specified by the County and Regional goals for a project of this size, and therefore the development would have a less significant impact.

Project consistency with applicable strategies in the CARB Scoping Plan is assessed. As shown in Table 19, the project is consistent with the applicable strategies and would result in a less than significant impact. Project will be compliant to current Title 24 building requirements including energy efficient programs (e.g., lighting, appliances, etc) and water conservation strategies. The project will be subject to the policies and ordinances

pertaining to air quality and climate change stated in the County's General Plan. Although the project would generate greenhouse gas emissions, either directly or indirectly, these emissions are not considered to have a significant impact on the environment.

8.0 References

The following references were used in the preparing this analysis.

CalEEMod. California Emissions Estimator Model. Version 2013.2.2 Website: http://caleemod.com/. Accessed: May 2016.

California Air Pollution Control Officers Association. 2008. CEQA & Climate Change, Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act. Website: www.capcoa.org/. Accessed: August 2012.

California Air Pollution Control Officers Association. 2010. Quantifying Greenhouse Gas Mitigation Measures. August 2010. Website: http://www.capcoa.org/documents. Accessed August 2012.

California Air Resources Board. 2006. EMFAC2007 Mobile Source Emission Model. Website: www.arb.ca.gov/msei/onroad/latest_version.htm. Accessed: October 3, 2011.

California Air Resources Board. 2007. Staff Report. California 1990 Greenhouse Gas Level and 2020 Emissions Limit. November 16, 2007. Website: www.arb.ca.gov/cc/inventory/pubs/reports/staff_report_1990_level.pdf. Accessed April 22, 2011.

California Air Resources Board. 2008. Climate Change Scoping Plan, a framework for change. December 2008. Accessed: Aug 2012. Website: www.arb.ca.gov/cc/scopingplan/document/scopingplandocument.htm

California Air Resources Board. 2010d. Greenhouse Gas Inventory – 2020 Forecast. Website: http://www.arb.ca.gov/cc/inventory/data/forecast.htm. Accessed July 2012.

California Air Resources Board. 2011b. Status of Scoping Plan Recommended Measures. Website: www.arb.ca.gov/cc/scopingplan/sp_measures_implementation_timeline.pdf. Accessed August 28, 2011.

California Air Resources Board. 2011d. Landfill Methane Control Measure. Website: http://arb.ca.gov/cc/landfills/landfills.htm. Accessed October 3, 2011.

California Air Resources Board. 2011e. Advanced Clean Cars. Website: http://www.arb.ca.gov/msprog/consumer_info/advanced_clean_cars/consumer_acc.htm. Accessed October 3, 2011.

California Air Resources Board. 2011f. Refrigerant Management Program Regulation for Non-Residential Refrigeration Systems. Website: http://www.arb.ca.gov/cc/reftrack/reftrack.htm. Accessed October 3, 2011.

Intergovernmental Panel on Climate Change. 2001. Climate Change 2001: The Scientific Basis. Website: http://www.grida.no/climate/ipcc_tar/wg1/pdf/WG1_TAR-FRONT.pdf. Accessed August 2012.

Intergovernmental Panel on Climate Change. 2007a. Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of

the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, Website: www.ipcc.ch/ipccreports/ar4-wg1.htm. Accessed April 22, 2011.

Intergovernmental Panel on Climate Change. 2007b. Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, Pachauri, R.K and Reisinger, A. (eds.)]. IPCC, Geneva, Switzerland. Accessed Aug 2012. Website: www.ipcc.ch/publications_and_data/ar4/syr/en/contents.html

Moser et al. 2009. Moser, Susie, Guido Franco, Sarah Pittiglio, Wendy Chou, Dan Cayan. 2009. The Future Is Now: An Update on Climate Change Science Impacts and Response Options for California. California Energy Commission, PIER Energy-Related Environmental Research Program. CEC-500-2008-071. Website: www.energy.ca.gov/2008publications/CEC-500-2008-071/CEC-500-2008-071.PDF. Accessed: August 2011.

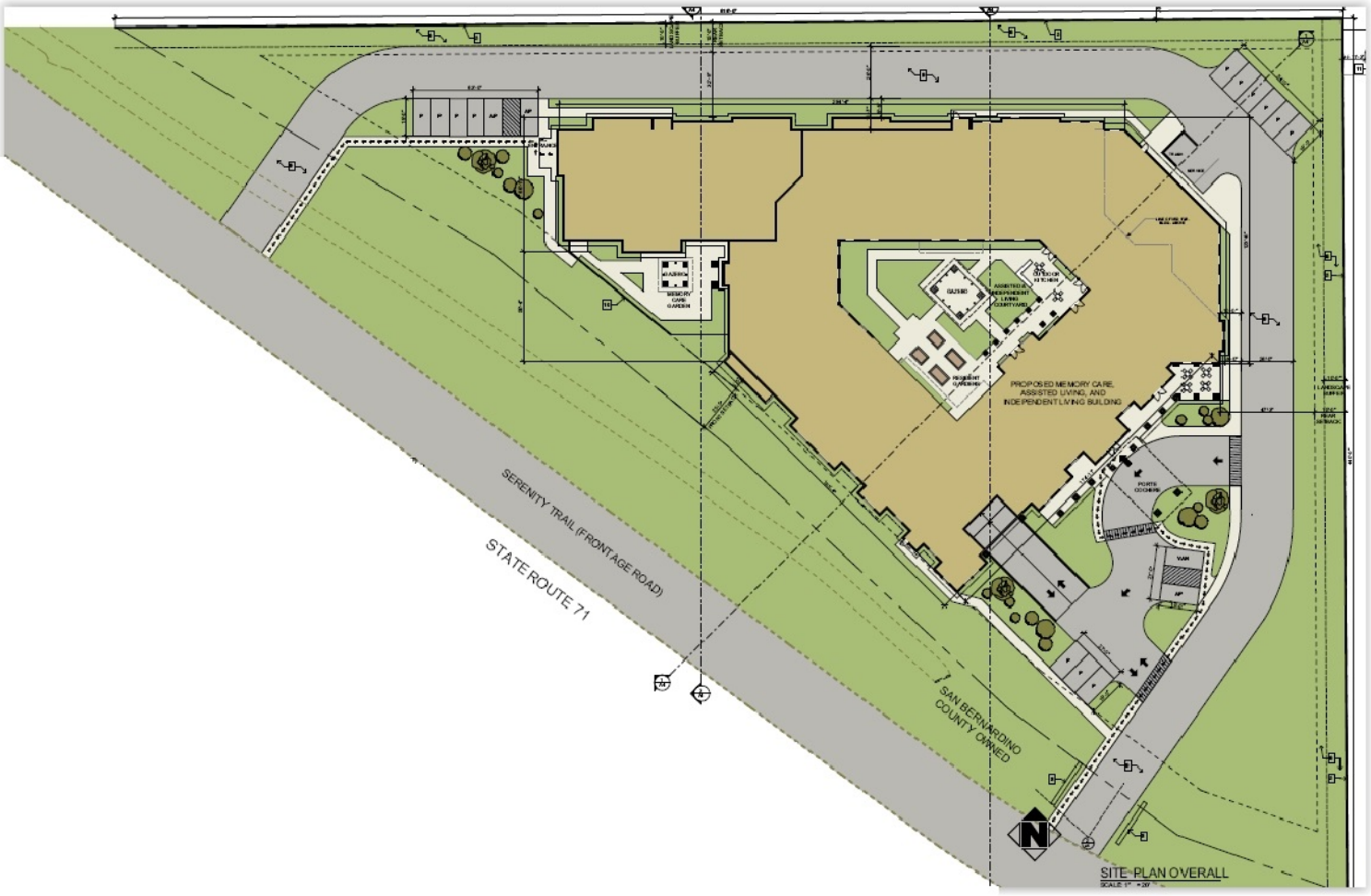
South Coast Air Quality Management District. 2008c. Draft Guidance Document – Interim CEQA Greenhouse (GHG) Significance Threshold Document. Website: http://www.aqmd.gov/hb/2008/December/081231a.htm. (Attachment E) Accessed: August 2012

U.S Environmental Protection Agency 2010a, Final GHG Tailoring Rule, 40 CFR Parts 51, 52, 70, et al., May 2010.

Exhibits

Exhibit A
Location Map

Exhibit B
Site Plan



N

Tables

TABLE 1
Land Use Summary[1]

Land Use	Unit Amount	Size Metric
Assisted Living	110	Dwelling Units

[1] Parking Lot includes landscaped and impervious pavement area.

TABLE 2
Description of Air Pollutants

Air Pollutant	Averaging Time	California Standard	Federal Standard[1]	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Ozone	1 Hour	0.09 ppm	--	(a) Decrease of pulmonary function and localized lung edema in humans and animals; (b) risk to public health implied by alterations in pulmonary morphology and host defense in animals; (c) increased mortality risk; (d) altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (e) vegetation damage; (f) property damage.	Ozone is a photochemical pollutant as it is not emitted directly into the atmosphere, but is formed by a complex series of chemical reactions between volatile organic compounds (VOC), NOX, and sunlight. Ozone is a regional pollutant that is generated over a large area and is transported and spread by the wind.	Ozone is a secondary pollutant; thus, it is not emitted directly into the lower level of the atmosphere. The primary sources of ozone precursors (VOC and NOX) are mobile sources (on-road and off-road vehicle exhaust).
	8 Hour	0.070 ppm	0.070 ppm[4]			
Carbon Monoxide (CO)	1 Hour	20 ppm	35 ppm	(a) Aggravation of angina pectoris (chest pain) and there aspects of coronary heart disease; (b) decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (c) impairment of central nervous system functions; (d) possible increased risk to fetuses.	CO is a colorless, odorless, toxic gas. CO is somewhat soluble in water; therefore, rainfall and fog can suppress CO conditions. CO enters the body through the lungs, dissolves in the blood, replaces oxygen as an attachment to hemoglobin, and reduces available oxygen in the blood.	CO is produced by incomplete combustion of carbon-containing fuels (e.g., gasoline, diesel fuel, and biomass). Sources include motor vehicle exhaust, industrial processes (metals processing and chemical manufacturing), residential wood burning, and natural sources.
	8 Hour	9 ppm	9 ppm			
Nitrogen Dioxide (NO_2)[2]	1 Hour	0.18 ppm	0.100 ppm	(a) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (b) risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; (c) contribution to atmospheric discoloration.	During combustion of fossil fuels, oxygen reacts with nitrogen to produce nitrogen oxides - NOX (NO, NO_2, NO_3, N_2O, N_2O_3, N_2O_4,and N_2O_5). NOX is a precursor to ozone, PM_{10}, and $PM_{2.5}$ formation. NOX can react with compounds to form nitric acid and related particles.	NOX is produced in motor vehicle internal combustion engines and fossil fuel-fired electric utility and industrial boilers. NO_2 concentrations near major roads can be 30 to 100 percent higher than those at monitoring stations.
	Annual	0.030 ppm	0.053 ppm			
Sulfur Dioxide (SO_2)	1 Hour	0.25 ppm	0.075 ppm	Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient sulfur dioxide levels. It is not clear whether the two pollutant alone is the predominant factor.	Sulfur dioxide is a colorless, pungent gas. At levels greater than 0.5 ppm, the gas has a strong odor, similar to rotten eggs. Sulfur oxides (SOX) include sulfur dioxide and sulfur trioxide. Sulfuric acid is formed from sulfur dioxide, which can lead to acid deposition and can harm natural resources and materials. Although sulfur dioxide concentrations have been reduced to levels well below state and federal standards, further reductions are desirable because sulfur dioxide is a precursor to sulfate and PM_{10}.	Human caused sources include fossil-fuel combustion, mineral ore processing, and chemical manufacturing. Volcanic emissions are a natural source of sulfur dioxide. The gas can also be produced in the air by dimethylsulfide and hydrogen sulfide. Sulfur dioxide is removed from the air by dissolution in water, chemical reactions, and transfer to soils and ice caps. The sulfur dioxide levels in the State are well below the maximum standards.
	3 Hour	--	0.5 ppm			
	24 Hour	0.04 ppm	--			
Particulate Matter (PM_{10})	24 Hour	50 $\mu g/m^3$	150 $\mu g/m^3$	(a) Exacerbation of symptoms in sensitive patients with respiratory or cardiovascular disease; (b) declines in pulmonary function growth in children; (c) increased risk of premature death from heart or lung diseases in the elderly. Daily fluctuations in PM2.5 levels have been related to hospital admissions for acute respiratory conditions, school absences, and increased medication use in children and adults with asthma.	Suspended particulate matter is a mixture of small particles that consist of dry solid fragments, droplets of water, or solid cores with liquid coatings. The particles vary in shape, size, and composition. PM $_{10}$ refers to particulate matter that is between 2.5 and 10 microns in diameter, (1 micron is one-millionth of a meter). $PM_{2.5}$ refers to particulate matter that is 2.5 microns or less in diameter.	Stationary sources include fuel combustion for electrical utilities, residential space heating, and industrial processes; construction and demolition; metals, minerals, and petrochemicals; wood products processing; mills and elevators used in agriculture; erosion from tilled lands; waste disposal, and recycling. Mobile or transportation-related sources are from vehicle exhaust and road dust.
	Mean	20 $\mu g/m^3$	--			
Particulate Matter (PM2.5)	24 Hour	--	35 $\mu g/m^3$			
	Annual	12 $\mu g/m^3$	12 $\mu g/m^3$			
Visibility reducing particles	8 Hour	Extinction coefficient of 0.23 per kilometer; visibility of ten miles or more (0.07 - 30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent.				
Sulfates	24 Hour	25 $\mu g/m^3$	--	(a) Decrease in ventilatory function; (b) aggravation of asthmatic symptoms; (c) aggravation of cardiopulmonary disease; (d) vegetation damage; (e) degradation of visibility; (f) property damage.	The sulfate ion is a polyatomic anion with the empirical formula SO4 2−. Sulfates occur in combination with metal and/or hydrogen ions. Many sulfates are soluble in water.	Sulfates are particulates formed through the photochemical oxidation of sulfur dioxide. In California, the main source of sulfur compounds is combustion of gasoline and diesel fuel.
Lead[3]	30-day	1.5 $\mu g/m^3$	--	Lead accumulates in bones, soft tissue, and blood and can affect the kidneys, liver, and nervous system. It can cause impairment of blood formation and nerve conduction, behavior disorders, mental retardation, neurological impairment, learning deficiencies, and low IQs.	Lead is a solid heavy metal that can exist in air pollution as an aerosol particle component. Leaded gasoline was used in motor vehicles until around 1970. Lead concentrations have not exceeded state or federal standards at any monitoring station since 1982.	Lead ore crushing, lead-ore smelting, and battery manufacturing are currently the largest sources of lead in the atmosphere in the United States. Other sources include dust from soils contaminated with lead-based paint, solid waste disposal, and crustal physical weathering.
	Quarter	--	1.5 $\mu g/m^3$			
	Rolling 3-month average	--	0.15 $\mu g/m^3$			
Vinyl chloride[3]	24 Hour	0.01 ppm	--	Short-term exposure to high levels of vinyl chloride in the air causes central nervous system effects, such as dizziness, drowsiness, and headaches. pidemiological studies of occupationally exposed workers have linked vinyl chloride exposure to development of a rare cancer, liver angiosarcoma, and have suggested a relationship between exposure and lung and brain cancers.	Vinyl chloride, or chloroethene, is a chlorinated hydrocarbon and a colorless gas with a mild, sweet odor. In 1990, ARB identified vinyl chloride as a toxic air contaminant and estimated a cancer unit risk factor.	Most vinyl chloride is used to make polyvinyl chloride plastic and vinyl products, including pipes, wire and cable coatings, and packaging materials. It can be formed when plastics containing these substances are left to decompose in solid waste landfills, sewage plants, and hazardous waste sites.
Hydrogen sulfide	24 Hour	0.03 ppm	--	High levels of hydrogen sulfide can cause immediate respiratory arrest. It can irritate the eyes and respiratory tract and cause headache, nausea, vomiting, and cough. Long exposure can cause pulmonary edema.	Hydrogen sulfide (H2S) is a flammable, colorless, poisonous gas that smells like rotten eggs.	Manure, storage tanks, ponds, anaerobic lagoons, and land application sites are the primary sources of hydrogen sulfide. Anthropogenic sources include the combustion of sulfur containing fuels (oil and coal).
Volatile organic compounds (VOC)		There are no State or federal standards for VOCs because they are not classified as criteria pollutants.		Although health-based standards have not been established for VOCs, health effects can occur from exposures to high concentrations because of interference with oxygen uptake. In general, concentrations of VOCs are suspected to cause eye, nose, and throat irritation; headaches; loss of coordination; nausea; and damage to the liver, the kidneys, and the central nervous system. Many VOCs have been classified as toxic air contaminants.	Reactive organic gases (ROGs), or VOCs, are defined as any compound of carbon—excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate—that participates in atmospheric photochemical reactions. Although there are slight differences in the definition of ROGs and VOCs, the two terms are often used interchangeably.	Indoor sources of VOCs include paints, solvents, aerosol sprays, cleansers, tobacco smoke, etc. Outdoor sources of VOCs are from combustion and fuel evaporation. A reduction in VOC emissions reduces certain chemical reactions that contribute to the formulation of ozone. VOCs are transformed into organic aerosols in the atmosphere, which contribute to higher PM10 and lower visibility.
Benzene		There are no ambient air quality standards for benzene.		Short-term (acute) exposure of high doses from inhalation of benzene may cause dizziness, drowsiness, headaches, eye irritation, skin irritation, and respiratory tract irritation, and at higher levels, loss of consciousness can occur. Long-term (chronic) occupational exposure of high doses has caused blood disorders, leukemia, and lymphatic cancer.	Benzene is a VOC. It is a clear or colorless light-yellow, volatile, highly flammable liquid with a gasoline-like odor. The EPA has classified benzene as a "Group A" carcinogen.	Benzene is emitted into the air from fuel evaporation, motor vehicle exhaust, tobacco smoke, and from burning oil and coal. Benzene is used as a solvent for paints, inks, oils, waxes, plastic, and rubber. It is used in the extraction of oils from seeds and nuts and in the manufacture of detergents, explosives, and pharmaceuticals.
Diesel particulate matter (DPM)		There are no ambient air quality standards for DPM.		Some short-term (acute) effects of DPM exposure include eye, nose, throat, and lung irritation, coughs, headaches, light-headedness, and nausea. Studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Human studies on the carcinogenicity of DPM demonstrate an increased risk of lung cancer, although the increased risk cannot be clearly attributed to diesel exhaust exposure.	DPM is a source of PM2.5—diesel particles are typically 2.5 microns and smaller. Diesel exhaust is a complex mixture of thousands of particles and gases that is produced when an engine burns diesel fuel. Organic compounds account for 80 percent of the total particulate matter mass, which consists of compounds such as hydrocarbons and their derivatives, and polycyclic aromatic hydrocarbons and their derivatives. Fifteen polycyclic aromatic hydrocarbons are confirmed carcinogens, a number of which are found in diesel exhaust.	Diesel exhaust is a major source of ambient particulate matter pollution in urban environments. Typically, the main source of DPM is from combustion of diesel fuel in diesel-powered engines. Such engines are in on-road vehicles such as diesel trucks, off-road construction vehicles, diesel electrical generators, and various pieces of stationary construction equipment.

Notes:

ppm = parts per million (concentration) µg/m3 = micrograms per cubic meter Annual = Annual Arithmetic Mean 30-day = 30-day average Quarter = Calendar quarter

[1] Federal standard refers to the primary national ambient air quality standard, or the levels of air quality necessary, with an adequate margin of safety to protect the public health. All standards listed are primary standards except for 3 Hour SO2, which is a secondary standard. A secondary standard is the level of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[2] Effective April 12, 2010; the 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 100 ppb, or 188 µg/m3

[3] The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[4] To attain this standard, the 3-year average of the 99th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 75 ppb.

Source of effects: South Coast Air Quality Management District 2007b; California Environmental Protection Agency 2002; California Air Resources Board 2009; U.S. Environmental Protection Agency 2010; U.S. Environmental Protection Agency 2000; National Toxicology Program 2005a.

Source of standards: California Air Resources Board 2010a.

Source of properties and sources: U.S. Environmental Protection Agency 1999; U.S. Environmental Protection Agency 2003; U.S. Environmental Protection Agency 2011b; U.S. Environmental Protection Agency 2009a; National Toxicology Program 2005b.

TABLE 3
Meteorological Summary[1]

Month	Temperature (˚F)			Average Precipitation (inches)
	Average	Average High	Average Low	
January	51.8	65.5	38.1	3.56
February	54.0	67.6	40.3	3.49
March	56.2	70.1	42.3	2.82
April	59.9	74.2	45.6	1.22
May	63.9	77.8	50.0	0.35
June	68.8	84.1	53.4	0.10
July	74.4	91.0	57.7	0.01
August	74.6	91.1	58.1	0.07
September	71.9	88.4	55.3	0.26
October	65.2	80.6	49.8	0.78
November	57.9	73.2	42.6	1.56
December	52.4	66.4	38.4	2.77
Yearly Average	**62.6**	**77.5**	**47.6**	**16.99**

[1] Averages derived from measurements recorded between 1893 and 2016, POMONA FAIRPLEX. (047050). Source: Western Regional Climate Center 2016.

TABLE 4
Air Quality Monitoring Summary

Air Pollutant Location	Averaging Time	Item	2013	2014	2015
Carbon Monoxide from Pomona/Walnut Valley Station	1 Hour	Max 1-Hour (ppm)	--	2.0	1.8
		Days > State Standard (20 ppm)	--	--	--
		Days >National Standard (35 ppm)	--	--	--
	8 Hour	Max 8 Hour (ppm)	1.6	1.6	1.6
		Days > State Standard (9 ppm)	--	--	--
		Days >National Standard (9 ppm)	--	--	--
Ozone from Pomona/Walnut Valley Station	1 Hour	Max 1-Hour (ppm)	0.125	0.123	0.136
		Days > State Standard (0.09 ppm)	12	22	30
	8 Hour	Max 8 Hour (ppm)	0.099	0.099	0.098
		Days > State Standard (0.07 ppm)	22	56	55
		Days >National Standard (0.075 ppm)[1]	15	33	36
		Days >National Standard (0.070 ppm)	-	-	53
Coarse Particles (PM10) from Corona/Norco Area Station	24 Hour	Max 24-Hour (μg/m^3)	58.0	65.0	87.0
		Days > State Standard (50 μg/m^3)	2	3	3
		Days >National Standard (150 μg/m^3)	0	0	0
	Annual	Annual Average (μg/m^3)	28.3	30.9	29.6
		Exceeded >State Standard (20 μg/m^3)	YES	YES	YES
Fine Particulates (PM2.5) from Metropolitan Riverside County 1 Station	24 Hour	Max 24-Hour (μg/m^3)	60.3	48.9	54.7
		Days >National Standard (35 μg/m^3)	6	5	9
	Annual	Annual Average (μg/m^3)	12.50	12.48	11.89
		Exceeded >State Standard (12 μg/m^3)	YES	YES	NO
		Exceeded >National Standard (15 μg/m^3)	NO	NO	NO
Nitrogen Dioxide from Pomona/Walnut Valley Station	1 Hour	Max 1-Hour (ppm)	0.0788	0.0889	0.0723
		Days > State Standard (0.18 ppm)	--	--	--
	Annual	Annual Average (ppm)	0.0225	0.0221	0.212
		Exceeded >State Standard (0.030 ppm)	NO	NO	NO
		Exceeded >National Standard (0.053 ppm)	NO	NO	NO
Sulfur Dioxide from Metropolitan Riverside County 1 Station	1 Hour	Max 1 Hour (ppm)	0.0081	0.0056	0.0019
		Days > State Standard (0.25 ppm)	--	--	--
		Days >National Standard (0.075 ppm)	--	--	--
	Annual	Annual Average (ppm)	- -	- -	- -
		Exceeded >National Standard (0.030 ppm)	- -	- -	- -

Source: EPA and ARB websites www.epa.gov/air/data.index.html and www.arb.ca.gov/adam/welcome.html
μg/m^3 = micrograms per cubic meter
ARB = California Air Resource Board
EPA= Environmental Protection Agency
ppm = part per million
(- -) = Data not provided
[1] = 2008 National Standards

j:\rktables\RK12094TB.xls
JN:2359-2016-04

TABLE 5
South Coast Air Quality Basin Attainment Status

Pollutant	State Status	National Status
Ozone	Nonattainment	Nonattainment (Extreme)
Carbon monoxide	Attainment	Attainment (Maintenance)
Nitrogen dioxide (annual)	Attainment	Attainment (Maintenance)
Nitrogen dioxide (1-hour)	Attainment	Attainment
Sulfur dioxide	Attainment	Attainment
PM_{10}	Nonattainment	Attainment
$PM_{2.5}$	Nonattainment	Nonattainment
Lead	Attainment	Nonattainment (Partial)[1]

[1] Partial Nonattainment designation – Los Angeles County portion of Basin only.

Source: State status from California Air Resources Board. http://www.arb.ca.gov/desig/adm/adm.htm

j:\rktables\RK12094TB.xls
JN:2359-2016-04

TABLE 6
Description of Greenhouse Gases[1]

Greenhouse Gas	Description and Physical Properties	Sources
Nitrous oxide	Nitrous oxide (N_20),also known as laughing gas is a colorless gas. It has a lifetime of 114 years. Its global warming potential is 310.	Microbial processes in soil and water, fuel combustion, and industrial processes. In addition to agricultural sources, some industrial processes (nylon production, nitric acid production) also emit N_20.
Methane	Methane (CH_4) is a flammable gas and is the main component of natural gas. It has a lifetime of 12 years. Its global warming potential is 21.	A natural source of CH_4 is from the decay of organic matter. Methane is extracted from geological deposits (natural gas fields). Other sources are from the decay of organic material in landfills, fermentation of manure, and cattle farming.
Carbon dioxide	Carbon dioxide (CO_2) is an odorless, colorless, natural greenhouse gas. Carbon dioxide's global warming potential is 1. The concentration in 2005 was 379 parts per million (ppm), which is an increase of about 1.4 ppm per year since 1960.	Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood.
Chlorofluorocarbons	CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). They are gases formed synthetically by replacing all hydrogen atoms in methane or methane with chlorine and/or fluorine atoms. Global warming potentials range from 3,800 to 8,100.	Chlorofluorocarbons were synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone, therefore their production was stopped as required by the Montreal Protocol.
Hydrofluorocarbons	Hydrofluorocarbons (HFCs) are a group of greenhouse gases containing carbon, chlorine, and at least one hydrogen atom. Global warming potentials range from 140 to 11,700.	Hydrofluorocarbons are synthetic manmade chemicals used as a substitute for chlorofluorocarbons in applications such as automobile air conditioners and refrigerants.
Perfluorocarbons	Perfluorocarbons (PFCs) have stable molecular structures and only break down by ultraviolet rays about 60 kilometers above the Earth's surface. They have a lifetime 10,000 to 50,000 years. They have a global warming potential range of 6,200 to 9,500.	Two main sources of perfluorocarbons are primary aluminum production and semiconductor manufacturing.
Sulfur hexafluoride	Sulfur hexafluoride (SF_6) is an inorganic, odorless, colorless, and nontoxic, nonflammable gas. It has a lifetime of 3,200 years. It has a high global warming potential, 23,900.	This gas is manmade and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

[1] Sources: Intergovernmental Panel on Climate Change 2007a and Intergovernmental Panel on Climate Change 2007b.

TABLE 7
Construction Equipment Assumptions

Phase	Equipment	Number	Hours per day	Horsepower	Load Factor	Soil Disturbance Rate (Acres/ 8hr-Day)[1]	Off-Road Equipment Daily Disturbance Footprint (Acres)	Total Daily Disturbance Footprint (Acres)
Site Preparation	Rubber Tired Dozers	3	8	247	0.40	0.5	1.5	3.5
	Tractors/Loaders/Backhoes	4	8	97	0.37	0.5	2.0	
Grading	Excavators	1	8	158	0.38	0.0	0.0	2.5
	Graders	1	8	187	0.41	0.5	0.5	
	Rubber Tired Dozers	1	8	247	0.40	0.5	0.5	
	Tractors/Loaders/Backhoes	3	8	97	0.37	0.5	1.5	
Building construction	Cranes	1	7	231	0.29	0.0	0.0	1.3
	Forklifts	3	8	89	0.20	0.0	0.0	
	Generator Sets	1	8	84	0.74	0.0	0.0	
	Tractors/Loaders/Backhoes	3	7	97	0.37	0.5	1.3	
	Welders	1	8	46	0.45	0.0	0.0	
Paving	Cement and Mortar Mixers	2	6	9	0.56	0.0	0.0	0.5
	Pavers	1	8	130	0.42	0.0	0.0	
	Paving Equipment	2	6	132	0.36	0.0	0.0	
	Rollers	2	6	80	0.38	0.0	0.0	
	Tractors/Loaders/Backhoes	1	8	97	0.37	0.5	0.5	
Architectural Coating	Air Compressors	1	6	78	0.48	0.0	0.0	0.0

[1] Soil disturbance rate is based on the SCAQMD Fact Sheet for Applying CalEEMod to Localized Significance Thresholds.

TABLE 8
Trip Generation Rates

Land Use	Quantity	Units[1]	Trip Generation Rate (trips/unit/day)[2]		
			Weekday	Saturday	Sunday
Congregate Care (Assisted Living)	110	DU	3.44	2.76	3.06

[1] DU = dwelling unit

[2] Trips rates have been converted from ITE Trip Generation Manual, 9th Edition to reflect trips per dwelling unit instead of trips per bed for purposes of modeling project in CalEEMod.

TABLE 9
Vehicle Mix for Trips[1]

Vehicle Class	Vehicle Mix (%)
Light Duty Automobile (LDA)	54.17%
Light Duty Truck (LDTI)	3.90%
Light Duty Truck (LDT2)	17.86%
Medium Duty Truck (MDV)	12.68%
Light Heavy Truck (LHD1)	1.97%
Light Heavy Truck (LHD2)	0.56%
Medium Heavy Truck (MHD)	1.71%
Heavy Heavy Truck (HHD)	6.01%
Other Bus (OBUS)	0.13%
Urban Bus (UBUS)	0.17%
Motorcycle (MCY)	0.62%
School Bus (SBUS)	0.08%
Motor Home (MH)	0.11%
Total	**100.0%**

[1] CalEEMod Defaults

TABLE 10
Operational Vehicle Trip Assumptions[1]

Residential Trips[2]

Land Use	Trip Length (miles) Residential			Percent of Trips (%) Residential		
	H-W	H-S	H-O	H-W	H-S	H-O
Congregate Care (Assisted Living)	14.7	5.9	8.7	40.2	19.2	40.6

[1] CalEEMod Defaults

[2] Residential Trips:
H-W = home-work; H-S = home-shop; H-O = home-other

TABLE 11
Operational Water and Waste

Land Use	Water Usage (gallons/year)[1]			Waste Generation (tons/year)[1]
	Indoor	Outdoor	Total	
Congregate Care (Assisted Living)	7,166,943	4,518,290	11,685,233	100.38

[1] CalEEMod Defaults

TABLE 12 A
Regional Significance - Construction Emissions (lbs/day)
(Unmitigated)

Summer

Activity	VOC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Site Preparation	8.37	174.44	42.40	0.36	29.21	15.20
Grading	3.18	33.96	18.07	0.03	8.50	5.05
Building Construction	3.93	29.55	25.11	0.04	3.04	2.03
Paving	1.66	14.61	13.56	0.02	1.06	0.83
Architectural Coating	21.09	2.10	2.98	0.01	0.38	0.21
Maximum[1]	22.75	174.44	42.40	0.36	29.21	15.20
SCAQMD Threshold	75	100	550	150	150	55
Exceeds Threshold (?)	**No**	**Yes**	**No**	**No**	**No**	**No**

Winter

Activity	VOC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Demolition	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	8.50	175.58	44.63	0.36	29.22	15.21
Grading	3.18	33.97	17.90	0.03	8.50	5.05
Building Construction	3.93	29.57	24.09	0.04	3.05	2.03
Paving	1.66	14.61	13.36	0.02	1.06	0.83
Architectural Coating	21.09	2.10	2.78	0.01	0.38	0.21
Maximum[1]	22.75	175.58	44.63	0.36	29.22	15.21
SCAQMD Threshold	75	100	550	150	150	55
Exceeds Threshold (?)	**No**	**Yes**	**No**	**No**	**No**	**No**

[1] Construction activities are not expected to overlap. However, to be conservative the paving and painting phases are combined as a worst case scenario, should such activity occur.

TABLE 12 B
Regional Significance - Construction Emissions (lbs/day)
Mitigated

Summer - Mitigated

Activity	VOC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Site Preparation	5.91	82.89	29.06	0.12	11.01	6.63
Grading	4.00	64.48	22.52	0.11	6.06	3.43
Building Construction	3.93	29.55	25.11	0.04	3.04	2.03
Paving	1.66	14.61	13.56	0.02	1.06	0.83
Architectural Coating	21.09	2.10	2.98	0.01	0.38	0.21
Maximum[1]	22.75	82.89	29.06	0.12	11.01	6.63
SCAQMD Threshold	75	100	550	150	150	55
Exceeds Threshold (?)	**No**	**No**	**No**	**No**	**No**	**No**

Winter - Mitigated

Activity	VOC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Demolition	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	5.94	83.17	29.47	0.12	11.01	6.63
Grading	4.03	64.77	22.96	0.11	6.06	3.43
Building Construction	3.93	29.57	24.09	0.04	3.05	2.03
Paving	1.66	14.61	13.36	0.02	1.06	0.83
Architectural Coating	21.09	2.10	2.78	0.01	0.38	0.21
Maximum[1]	22.75	83.17	29.47	0.12	11.01	6.63
SCAQMD Threshold	75	100	550	150	150	55
Exceeds Threshold (?)	**No**	**No**	**No**	**No**	**No**	**No**

[1] Construction activities are not expected to overlap. However, to be conservative the paving and painting phases are combined as a worst case scenario, should such activity occur.

TABLE 13
Construction Localized Significance

LST Pollutants[1]	CO (lbs/day)	NOx (lbs/day)	PM_{10} (lbs/day)	$PM_{2.5}$ (lbs/day)
On-site Emissions[2]	44.63	175.58	11.01	6.63
SCAQMD Construction Threshold[3]	2,193	270	16	9
Exceeds Threshold (?)	**No**	**No**	**No**	**No**

[1] Reference LST thresholds are from 2006-2008 SCAQMD Mass rate Localized Significant Thresholds for construction and operation Tables C-1 through C-6 for a disturbance area of 5 acres and at a receptor distance of 25 meters.

[2] On-site emissions are based on maximum daily values during summer or winter months.

[3] Reference: Source Receptor Area 33 Thresholds.

j:\rktables\RK12094TB.xls
JN:2359-2016-04

TABLE 14
Regional Significance - Operational Emissions (lbs/day)[1]

Summer

Activity	VOC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Mobile Sources	1.02	6.25	12.31	0.04	2.80	0.77
Energy Sources	0.06	0.52	0.22	0.00	0.04	0.04
Area Sources	1.55	0.21	9.17	0.00	0.06	0.06
Total: Area Sources + Energy + Mobile	2.63	6.97	21.70	0.04	2.90	0.87
SCAQMD Threshold	55	55	550	150	150	55
Exceeds Threshold (?)	**No**	**No**	**No**	**No**	**No**	**No**

Winter

Activity	VOC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Mobile Sources	0.89	6.30	10.80	0.04	2.80	0.78
Energy Sources	0.06	0.52	0.22	0.00	0.04	0.04
Area Sources	1.55	0.21	9.17	0.00	0.06	0.06
Total: Area Sources + Energy + Mobile	2.50	7.02	20.19	0.04	2.90	0.88
SCAQMD Threshold	55	55	550	150	150	55
Exceeds Threshold (?)	**No**	**No**	**No**	**No**	**No**	**No**

[1] Emissions levels do not exceed the significance thresholds, therefore no additional air quality reduction measures would be required

TABLE 15
Localized Significance - Operational Emissions

LST Pollutants[1]	NOx (lbs/day)	CO (lbs/day)	PM_{10} (lbs/day)	$PM_{2.5}$ (lbs/day)
On-site Emissions[2]	1.04	10.01	0.2	0.14
SCAQMD Operation Threshold[3]	270	2,193	4	2
Exceeds Threshold (?)	**No**	**No**	**No**	**No**

[1] Reference LST thresholds are from 2006-2008 SCAQMD Mass rate Localized Significant Thresholds for construction and operation Table C-1 through C-6 for a disturbance area of 5-acre and at a receptor distance of 25 meters.

[2] Per LST methodology, mobile source emissions do not need to be included except for land use emissions and on-site vehicle emissions. It is estimated that approximately 5% of mobile emissions will occur on the project site. Emissions are maximum daily value during either of summer or winter.

[3] Reference: Source Receptor Area 33 Thresholds.

Table 16
Construction Greenhouse Gas Emissions

Activity	Emissions ($MTC0_2e$)[1]		
	Onsite	Offsite	Total
Demolition	0.00	0.00	0.00
Site Preparation	17.80	39.46	57.26
Grading	13.89	39.31	53.20
Building Construction	159.70	100.25	259.95
Paving	15.40	1.81	17.21
Coating	2.30	1.81	4.11
Total	209.09	182.64	391.73
Averaged over 30 years[2]	6.97	6.09	13.06

[1] $MTCO_2e$=metric tons of carbon dioxide equivalents (includes carbon dioxide, methane, nitrous oxide, and/or hydroflurocarbons).

[2] The emissions are averaged over 30 years because the average is added to the operational emissions, pursuant to SCAQMD recommendations.

* CalEEMod output (Appendix B)

TABLE 17
Project Greenhouse Gas Emissions During Operation

Emission Source	Emissions ($MTCO_2e$) with Regulation[1]
Mobile Source	604.59
Energy Source	315.55
Area Source	3.35
Water	55.65
Waste	50.48
Subtotal (Operation)	1,029.62
Subtotal Construction (averaged over 30 years)	13.06
Total Annual Emissions	**1,043**

[1] $MTCO_2e$ = metric tons of carbon dioxide equivalents

j:\rktables\RK12094TB.xls
JN:2359-2016-04

TABLE 18
Significance of Greenhouse Gases

Item	Emissions With Regulation	Units
Total Annual Emissions[1]	1,043	$MTCO_2e$/year
SCAQMD Draft Tier 3 / CAP threshold	3,000	$MTCO_2e$/year
Exceed Tier 3 Threshold?	No	
Significant impact?	No	

[1] Refer to Table 16 for emissions

TABLE 19
Project Consistency with CARB Scoping Measures[1]

Scoping Plan Measures to Reduce Greenhouse Gas Emissions	Project Compliance with Measure
California Light-Duty Vehicle Greenhouse Gas Standards – Implement adopted standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy
Energy Efficiency – Maximize energy efficiency building and appliance standards; pursue additional efficiency including new technologies, policy, and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California.	Consistent. The project will be compliant with the current Title 24 standards. 2013 Title 24 Standards are at least 30 percent more efficient than 2008 Title 24 standards for energy efficiency.
Low Carbon Fuel Standard – Develop and adopt the Low Carbon Fuel Standard.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Vehicle Efficiency Measures – Implement light-duty vehicle efficiency measures.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Medium/Heavy-Duty Vehicles – Adopt medium and heavy-duty vehicle efficiency measures.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Green Building Strategy – Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.	Consistent. The California Green Building Standards Code (proposed Part 11, Title 24) was adopted as part of the California Building Standards Code in the CCR. Part 11 establishes voluntary standards, that are mandatory in the 2010 edition of the Code, on planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The project will be subject to these mandatory standards.
High Global Warming Potential Gases – Adopt measures to reduce high global warming potential gases.	Consistent. CARB identified five measures that reduce HFC emissions from vehicular and commercial refrigeration systems; vehicles that access the project that are required to comply with the measures will comply with the strategy.
Recycling and Waste – Reduce methane emissions at landfills. Increase waste diversion, composting, and commercial recycling. Move toward zero-waste.	Consistent. The state is currently developing a regulation to reduce methane emissions from municipal solid waste landfills. The project will be required to comply with County programs, such as County's recycling and waste reduction program, which initially comply, with the 50 percent reduction required in AB 939, then the 75% reduction by 2020 required in AB 341
Water – Continue efficiency programs and use cleaner energy sources to move and treat water.	Consistent. The project will comply with all applicable County ordinances and CAL Green requirements.

[1] Source: CARB Scoping Plan (2008)

Appendices

Appendix A

Project
Emission Calculations Output
(CalEEMod)

Summerland Senior Living Project

San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	37.00	Space	0.00	14,800.00	0
Other Asphalt Surfaces	32.10	1000sqft	0.74	32,100.00	0
Congregate Care (Assisted Living)	110.00	Dwelling Unit	2.42	57,356.00	315

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per Site Plan.

Construction Phase -

Grading -

Woodstoves - No fireplaces will be placed in the dwelling units, but six natural gas fire places will be placed in the common areas.

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	93.50	6.00
tblFireplaces	NumberNoFireplace	11.00	104.00
tblFireplaces	NumberWood	5.50	0.00
tblGrading	MaterialExported	0.00	16,000.00
tblGrading	MaterialImported	0.00	4,000.00
tblLandUse	BuildingSpaceSquareFeet	110,000.00	57,356.00
tblLandUse	LandUseSquareFeet	110,000.00	57,356.00
tblLandUse	LotAcreage	0.33	0.00
tblLandUse	LotAcreage	6.88	2.42
tblProjectCharacteristics	OperationalYear	2018	2019
tblWoodstoves	NumberCatalytic	5.50	0.00
tblWoodstoves	NumberNoncatalytic	5.50	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	8.3699	174.4368	42.4040	0.3638	25.7209	3.4856	29.2065	11.9721	3.2290	15.2011	0.0000	38,401.8484	38,401.8484	3.1339	0.0000	38,480.1955
2018	21.0921	26.1629	23.6471	0.0442	1.2283	1.5237	2.7520	0.3285	1.4325	1.7610	0.0000	4,369.0488	4,369.0488	0.7241	0.0000	4,387.1504
Maximum	**21.0921**	**174.4368**	**42.4040**	**0.3638**	**25.7209**	**3.4856**	**29.2065**	**11.9721**	**3.2290**	**15.2011**	**0.0000**	**38,401.8484**	**38,401.8484**	**3.1339**	**0.0000**	**38,480.1955**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	8.3699	174.4368	42.4040	0.3638	25.7209	3.4856	29.2065	11.9721	3.2290	15.2011	0.0000	38,401.8484	38,401.8484	3.1339	0.0000	38,480.1955
2018	21.0921	26.1629	23.6471	0.0442	1.2283	1.5237	2.7520	0.3285	1.4325	1.7610	0.0000	4,369.0488	4,369.0488	0.7241	0.0000	4,387.1504
Maximum	**21.0921**	**174.4368**	**42.4040**	**0.3638**	**25.7209**	**3.4856**	**29.2065**	**11.9721**	**3.2290**	**15.2011**	**0.0000**	**38,401.8484**	**38,401.8484**	**3.1339**	**0.0000**	**38,480.1955**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.5457	0.2052	9.1696	1.1200e-003		0.0580	0.0580		0.0580	0.0580	0.0000	143.4147	143.4147	0.0185	2.3300e-003	144.5718
Energy	0.0607	0.5187	0.2207	3.3100e-003		0.0419	0.0419		0.0419	0.0419		662.1837	662.1837	0.0127	0.0121	666.1187
Mobile	0.8114	4.9790	9.8069	0.0319	2.1959	0.0313	2.2272	0.5877	0.0295	0.6172		3,240.6065	3,240.6065	0.1731		3,244.9336
Total	**2.4178**	**5.7030**	**19.1971**	**0.0363**	**2.1959**	**0.1313**	**2.3272**	**0.5877**	**0.1295**	**0.7172**	**0.0000**	**4,046.2048**	**4,046.2048**	**0.2043**	**0.0145**	**4,055.6240**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.5457	0.2052	9.1696	1.1200e-003		0.0580	0.0580		0.0580	0.0580	0.0000	143.4147	143.4147	0.0185	2.3300e-003	144.5718
Energy	0.0607	0.5187	0.2207	3.3100e-003		0.0419	0.0419		0.0419	0.0419		662.1837	662.1837	0.0127	0.0121	666.1187
Mobile	0.8114	4.9790	9.8069	0.0319	2.1959	0.0313	2.2272	0.5877	0.0295	0.6172		3,240.6065	3,240.6065	0.1731		3,244.9336
Total	**2.4178**	**5.7030**	**19.1971**	**0.0363**	**2.1959**	**0.1313**	**2.3272**	**0.5877**	**0.1295**	**0.7172**	**0.0000**	**4,046.2048**	**4,046.2048**	**0.2043**	**0.0145**	**4,055.6240**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	6/1/2018	6/26/2018	5	18	
2	Building Construction	Building Construction	6/20/2017	5/7/2018	5	230	
3	Grading	Grading	6/8/2017	6/19/2017	5	8	
4	Paving	Paving	5/8/2018	5/31/2018	5	18	
5	Site Preparation	Site Preparation	6/1/2017	6/7/2017	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0.74

Residential Indoor: 116,146; Residential Outdoor: 38,715; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 2,814 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading	Excavators	1	8.00	158	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	6.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	99.00	19.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	2,000.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.6630					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
Total	**20.9616**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.1171**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1305	0.0897	1.1246	2.4300e-003	0.2236	1.5500e-003	0.2251	0.0593	1.4300e-003	0.0607		241.4857	241.4857	8.9000e-003		241.7082
Total	**0.1305**	**0.0897**	**1.1246**	**2.4300e-003**	**0.2236**	**1.5500e-003**	**0.2251**	**0.0593**	**1.4300e-003**	**0.0607**		**241.4857**	**241.4857**	**8.9000e-003**		**241.7082**

3.2 Architectural Coating - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.6630					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171
Total	**20.9616**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.1171**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1305	0.0897	1.1246	2.4300e-003	0.2236	1.5500e-003	0.2251	0.0593	1.4300e-003	0.0607		241.4857	241.4857	8.9000e-003		241.7082
Total	**0.1305**	**0.0897**	**1.1246**	**2.4300e-003**	**0.2236**	**1.5500e-003**	**0.2251**	**0.0593**	**1.4300e-003**	**0.0607**		**241.4857**	**241.4857**	**8.9000e-003**		**241.7082**

3.3 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1149	26.5546	18.1825	0.0269		1.7879	1.7879		1.6791	1.6791		2,650.9797	2,650.9797	0.6531		2,667.3078
Total	**3.1149**	**26.5546**	**18.1825**	**0.0269**		**1.7879**	**1.7879**		**1.6791**	**1.6791**		**2,650.9797**	**2,650.9797**	**0.6531**		**2,667.3078**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0878	2.4816	0.5716	5.2600e-003	0.1217	0.0206	0.1422	0.0350	0.0197	0.0547		553.4925	553.4925	0.0398		554.4883
Worker	0.7233	0.5102	6.3583	0.0124	1.1066	7.9800e-003	1.1146	0.2935	7.3600e-003	0.3008		1,229.4608	1,229.4608	0.0502		1,230.7152
Total	**0.8112**	**2.9917**	**6.9299**	**0.0176**	**1.2283**	**0.0285**	**1.2568**	**0.3285**	**0.0270**	**0.3555**		**1,782.9533**	**1,782.9533**	**0.0900**		**1,785.2036**

3.3 Building Construction - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1149	26.5546	18.1825	0.0269		1.7879	1.7879		1.6791	1.6791	0.0000	2,650.9797	2,650.9797	0.6531		2,667.3078
Total	**3.1149**	**26.5546**	**18.1825**	**0.0269**		**1.7879**	**1.7879**		**1.6791**	**1.6791**	**0.0000**	**2,650.9797**	**2,650.9797**	**0.6531**		**2,667.3078**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0878	2.4816	0.5716	5.2600e-003	0.1217	0.0206	0.1422	0.0350	0.0197	0.0547		553.4925	553.4925	0.0398		554.4883
Worker	0.7233	0.5102	6.3583	0.0124	1.1066	7.9800e-003	1.1146	0.2935	7.3600e-003	0.3008		1,229.4608	1,229.4608	0.0502		1,230.7152
Total	**0.8112**	**2.9917**	**6.9299**	**0.0176**	**1.2283**	**0.0285**	**1.2568**	**0.3285**	**0.0270**	**0.3555**		**1,782.9533**	**1,782.9533**	**0.0900**		**1,785.2036**

3.3 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099		2,620.9351	2,620.9351	0.6421		2,636.9883
Total	**2.6795**	**23.3900**	**17.5804**	**0.0269**		**1.4999**	**1.4999**		**1.4099**	**1.4099**		**2,620.9351**	**2,620.9351**	**0.6421**		**2,636.9883**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0766	2.3288	0.5000	5.2500e-003	0.1217	0.0162	0.1379	0.0350	0.0155	0.0505		552.7593	552.7593	0.0379		553.7066
Worker	0.6459	0.4441	5.5667	0.0120	1.1066	7.6900e-003	1.1143	0.2935	7.0800e-003	0.3006		1,195.3544	1,195.3544	0.0440		1,196.4555
Total	**0.7224**	**2.7729**	**6.0667**	**0.0173**	**1.2283**	**0.0239**	**1.2521**	**0.3285**	**0.0226**	**0.3511**		**1,748.1137**	**1,748.1137**	**0.0819**		**1,750.1621**

3.3 Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099	0.0000	2,620.9351	2,620.9351	0.6421		2,636.9883
Total	**2.6795**	**23.3900**	**17.5804**	**0.0269**		**1.4999**	**1.4999**		**1.4099**	**1.4099**	**0.0000**	**2,620.9351**	**2,620.9351**	**0.6421**		**2,636.9883**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0766	2.3288	0.5000	5.2500e-003	0.1217	0.0162	0.1379	0.0350	0.0155	0.0505		552.7593	552.7593	0.0379		553.7066
Worker	0.6459	0.4441	5.5667	0.0120	1.1066	7.6900e-003	1.1143	0.2935	7.0800e-003	0.3006		1,195.3544	1,195.3544	0.0440		1,196.4555
Total	**0.7224**	**2.7729**	**6.0667**	**0.0173**	**1.2283**	**0.0239**	**1.2521**	**0.3285**	**0.0226**	**0.3511**		**1,748.1137**	**1,748.1137**	**0.0819**		**1,750.1621**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.0705	33.8868	17.1042	0.0297		1.7774	1.7774		1.6352	1.6352		3,037.9107	3,037.9107	0.9308		3,061.1809
Total	**3.0705**	**33.8868**	**17.1042**	**0.0297**	**6.5523**	**1.7774**	**8.3298**	**3.3675**	**1.6352**	**5.0027**		**3,037.9107**	**3,037.9107**	**0.9308**		**3,061.1809**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1096	0.0773	0.9634	1.8800e-003	0.1677	1.2100e-003	0.1689	0.0445	1.1200e-003	0.0456		186.2819	186.2819	7.6000e-003		186.4720
Total	**0.1096**	**0.0773**	**0.9634**	**1.8800e-003**	**0.1677**	**1.2100e-003**	**0.1689**	**0.0445**	**1.1200e-003**	**0.0456**		**186.2819**	**186.2819**	**7.6000e-003**		**186.4720**

3.4 Grading - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.0705	33.8868	17.1042	0.0297		1.7774	1.7774		1.6352	1.6352	0.0000	3,037.9107	3,037.9107	0.9308		3,061.1809
Total	**3.0705**	**33.8868**	**17.1042**	**0.0297**	**6.5523**	**1.7774**	**8.3298**	**3.3675**	**1.6352**	**5.0027**	**0.0000**	**3,037.9107**	**3,037.9107**	**0.9308**		**3,061.1809**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1096	0.0773	0.9634	1.8800e-003	0.1677	1.2100e-003	0.1689	0.0445	1.1200e-003	0.0456		186.2819	186.2819	7.6000e-003		186.4720
Total	**0.1096**	**0.0773**	**0.9634**	**1.8800e-003**	**0.1677**	**1.2100e-003**	**0.1689**	**0.0445**	**1.1200e-003**	**0.0456**		**186.2819**	**186.2819**	**7.6000e-003**		**186.4720**

3.5 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4239	14.5184	12.4333	0.0189		0.8370	0.8370		0.7718	0.7718		1,872.5505	1,872.5505	0.5672		1,886.7312
Paving	0.1077					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5316**	**14.5184**	**12.4333**	**0.0189**		**0.8370**	**0.8370**		**0.7718**	**0.7718**		**1,872.5505**	**1,872.5505**	**0.5672**		**1,886.7312**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1305	0.0897	1.1246	2.4300e-003	0.2236	1.5500e-003	0.2251	0.0593	1.4300e-003	0.0607		241.4857	241.4857	8.9000e-003		241.7082
Total	**0.1305**	**0.0897**	**1.1246**	**2.4300e-003**	**0.2236**	**1.5500e-003**	**0.2251**	**0.0593**	**1.4300e-003**	**0.0607**		**241.4857**	**241.4857**	**8.9000e-003**		**241.7082**

3.5 Paving - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4239	14.5184	12.4333	0.0189		0.8370	0.8370		0.7718	0.7718	0.0000	1,872.5505	1,872.5505	0.5672		1,886.7312
Paving	0.1077					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5316**	**14.5184**	**12.4333**	**0.0189**		**0.8370**	**0.8370**		**0.7718**	**0.7718**	**0.0000**	**1,872.5505**	**1,872.5505**	**0.5672**		**1,886.7312**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1305	0.0897	1.1246	2.4300e-003	0.2236	1.5500e-003	0.2251	0.0593	1.4300e-003	0.0607		241.4857	241.4857	8.9000e-003		241.7082
Total	**0.1305**	**0.0897**	**1.1246**	**2.4300e-003**	**0.2236**	**1.5500e-003**	**0.2251**	**0.0593**	**1.4300e-003**	**0.0607**		**241.4857**	**241.4857**	**8.9000e-003**		**241.7082**

3.6 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.5186	0.0000	18.5186	9.9992	0.0000	9.9992			0.0000			0.0000
Off-Road	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483		3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**18.5186**	**2.8786**	**21.3972**	**9.9992**	**2.6483**	**12.6475**		**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.2776	122.0686	17.7926	0.3236	7.0011	0.6056	7.6067	1.9196	0.5794	2.4990		34,283.3600	34,283.3600	1.9314		34,331.6439
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
Worker	0.1315	0.0928	1.1561	2.2500e-003	0.2012	1.4500e-003	0.2027	0.0534	1.3400e-003	0.0547		223.5383	223.5383	9.1200e-003		223.7664
Total	**3.4092**	**122.1614**	**18.9486**	**0.3258**	**7.2023**	**0.6070**	**7.8093**	**1.9729**	**0.5807**	**2.5537**		**34,506.8983**	**34,506.8983**	**1.9405**		**34,555.4103**

3.6 Site Preparation - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.5186	0.0000	18.5186	9.9992	0.0000	9.9992			0.0000			0.0000
Off-Road	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483	0.0000	3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**18.5186**	**2.8786**	**21.3972**	**9.9992**	**2.6483**	**12.6475**	**0.0000**	**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.2776	122.0686	17.7926	0.3236	7.0011	0.6056	7.6067	1.9196	0.5794	2.4990		34,283.3600	34,283.3600	1.9314		34,331.6439
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
Worker	0.1315	0.0928	1.1561	2.2500e-003	0.2012	1.4500e-003	0.2027	0.0534	1.3400e-003	0.0547		223.5383	223.5383	9.1200e-003		223.7664
Total	**3.4092**	**122.1614**	**18.9486**	**0.3258**	**7.2023**	**0.6070**	**7.8093**	**1.9729**	**0.5807**	**2.5537**		**34,506.8983**	**34,506.8983**	**1.9405**		**34,555.4103**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.8114	4.9790	9.8069	0.0319	2.1959	0.0313	2.2272	0.5877	0.0295	0.6172		3,240.6065	3,240.6065	0.1731		3,244.9336
Unmitigated	0.8114	4.9790	9.8069	0.0319	2.1959	0.0313	2.2272	0.5877	0.0295	0.6172		3,240.6065	3,240.6065	0.1731		3,244.9336

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Congregate Care (Assisted Living)	301.40	242.00	268.40	984,823	984,823
Enclosed Parking with Elevator	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	301.40	242.00	268.40	984,823	984,823

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Congregate Care (Assisted	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.541740	0.038987	0.178620	0.126833	0.019742	0.005671	0.017070	0.060066	0.001326	0.001715	0.006244	0.000823	0.001163
Other Asphalt Surfaces	0.541740	0.038987	0.178620	0.126833	0.019742	0.005671	0.017070	0.060066	0.001326	0.001715	0.006244	0.000823	0.001163
Congregate Care (Assisted Living)	0.541740	0.038987	0.178620	0.126833	0.019742	0.005671	0.017070	0.060066	0.001326	0.001715	0.006244	0.000823	0.001163

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0607	0.5187	0.2207	3.3100e-003		0.0419	0.0419		0.0419	0.0419		662.1837	662.1837	0.0127	0.0121	666.1187
NaturalGas Unmitigated	0.0607	0.5187	0.2207	3.3100e-003		0.0419	0.0419		0.0419	0.0419		662.1837	662.1837	0.0127	0.0121	666.1187

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Congregate Care (Assisted Living)	5628.56	0.0607	0.5187	0.2207	3.3100e-003		0.0419	0.0419		0.0419	0.0419		662.1837	662.1837	0.0127	0.0121	666.1187
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0607**	**0.5187**	**0.2207**	**3.3100e-003**		**0.0419**	**0.0419**		**0.0419**	**0.0419**		**662.1837**	**662.1837**	**0.0127**	**0.0121**	**666.1187**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Congregate Care (Assisted Living)	5.62856	0.0607	0.5187	0.2207	3.3100e-003		0.0419	0.0419		0.0419	0.0419		662.1837	662.1837	0.0127	0.0121	666.1187
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0607**	**0.5187**	**0.2207**	**3.3100e-003**		**0.0419**	**0.0419**		**0.0419**	**0.0419**		**662.1837**	**662.1837**	**0.0127**	**0.0121**	**666.1187**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.5457	0.2052	9.1696	1.1200e-003		0.0580	0.0580		0.0580	0.0580	0.0000	143.4147	143.4147	0.0185	2.3300e-003	144.5718
Unmitigated	1.5457	0.2052	9.1696	1.1200e-003		0.0580	0.0580		0.0580	0.0580	0.0000	143.4147	143.4147	0.0185	2.3300e-003	144.5718

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1019					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1523					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0117	0.0995	0.0424	6.4000e-004		8.0500e-003	8.0500e-003		8.0500e-003	8.0500e-003	0.0000	127.0588	127.0588	2.4400e-003	2.3300e-003	127.8139
Landscaping	0.2799	0.1057	9.1272	4.8000e-004		0.0500	0.0500		0.0500	0.0500		16.3559	16.3559	0.0161		16.7579
Total	**1.5457**	**0.2052**	**9.1696**	**1.1200e-003**		**0.0581**	**0.0581**		**0.0581**	**0.0581**	**0.0000**	**143.4147**	**143.4147**	**0.0185**	**2.3300e-003**	**144.5718**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1019					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1523					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0117	0.0995	0.0424	6.4000e-004		8.0500e-003	8.0500e-003		8.0500e-003	8.0500e-003	0.0000	127.0588	127.0588	2.4400e-003	2.3300e-003	127.8139
Landscaping	0.2799	0.1057	9.1272	4.8000e-004		0.0500	0.0500		0.0500	0.0500		16.3559	16.3559	0.0161		16.7579
Total	**1.5457**	**0.2052**	**9.1696**	**1.1200e-003**		**0.0581**	**0.0581**		**0.0581**	**0.0581**	**0.0000**	**143.4147**	**143.4147**	**0.0185**	**2.3300e-003**	**144.5718**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Summerland Senior Living Project

San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	37.00	Space	0.00	14,800.00	0
Other Asphalt Surfaces	32.10	1000sqft	0.74	32,100.00	0
Congregate Care (Assisted Living)	110.00	Dwelling Unit	2.42	57,356.00	315

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per Site Plan.

Construction Phase -

Grading -

Woodstoves - No fireplaces will be placed in the dwelling units, but six natural gas fire places will be placed in the common areas.

Summerland Senior Living Project - San Bernardino-South Coast County, Winter

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	93.50	6.00
tblFireplaces	NumberNoFireplace	11.00	104.00
tblFireplaces	NumberWood	5.50	0.00
tblGrading	MaterialExported	0.00	16,000.00
tblGrading	MaterialImported	0.00	4,000.00
tblLandUse	BuildingSpaceSquareFeet	110,000.00	57,356.00
tblLandUse	LandUseSquareFeet	110,000.00	57,356.00
tblLandUse	LotAcreage	0.33	0.00
tblLandUse	LotAcreage	6.88	2.42
tblProjectCharacteristics	OperationalYear	2018	2019
tblWoodstoves	NumberCatalytic	5.50	0.00
tblWoodstoves	NumberNoncatalytic	5.50	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	8.5028	175.5794	44.6325	0.3556	25.7209	3.4942	29.2151	11.9721	3.2372	15.2093	0.0000	37,530.6486	37,530.6486	3.2867	0.0000	37,612.8153
2018	21.0917	26.1767	22.7427	0.0427	1.2283	1.5239	2.7522	0.3285	1.4327	1.7612	0.0000	4,225.0079	4,225.0079	0.7226	0.0000	4,243.0717
Maximum	**21.0917**	**175.5794**	**44.6325**	**0.3556**	**25.7209**	**3.4942**	**29.2151**	**11.9721**	**3.2372**	**15.2093**	**0.0000**	**37,530.6486**	**37,530.6486**	**3.2867**	**0.0000**	**37,612.8153**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	8.5028	175.5794	44.6325	0.3556	25.7209	3.4942	29.2151	11.9721	3.2372	15.2093	0.0000	37,530.6486	37,530.6486	3.2867	0.0000	37,612.8153
2018	21.0917	26.1767	22.7427	0.0427	1.2283	1.5239	2.7522	0.3285	1.4327	1.7612	0.0000	4,225.0079	4,225.0079	0.7226	0.0000	4,243.0717
Maximum	**21.0917**	**175.5794**	**44.6325**	**0.3556**	**25.7209**	**3.4942**	**29.2151**	**11.9721**	**3.2372**	**15.2093**	**0.0000**	**37,530.6486**	**37,530.6486**	**3.2867**	**0.0000**	**37,612.8153**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.5457	0.2052	9.1696	1.1200e-003		0.0580	0.0580		0.0580	0.0580	0.0000	143.4147	143.4147	0.0185	2.3300e-003	144.5718
Energy	0.0607	0.5187	0.2207	3.3100e-003		0.0419	0.0419		0.0419	0.0419		662.1837	662.1837	0.0127	0.0121	666.1187
Mobile	0.7121	5.0171	8.6002	0.0293	2.1959	0.0316	2.2275	0.5877	0.0298	0.6175		2,986.3672	2,986.3672	0.1738		2,990.7117
Total	**2.3185**	**5.7410**	**17.9904**	**0.0338**	**2.1959**	**0.1316**	**2.3275**	**0.5877**	**0.1298**	**0.7175**	**0.0000**	**3,791.9656**	**3,791.9656**	**0.2050**	**0.0145**	**3,801.4022**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.5457	0.2052	9.1696	1.1200e-003		0.0580	0.0580		0.0580	0.0580	0.0000	143.4147	143.4147	0.0185	2.3300e-003	144.5718
Energy	0.0607	0.5187	0.2207	3.3100e-003		0.0419	0.0419		0.0419	0.0419		662.1837	662.1837	0.0127	0.0121	666.1187
Mobile	0.7121	5.0171	8.6002	0.0293	2.1959	0.0316	2.2275	0.5877	0.0298	0.6175		2,986.3672	2,986.3672	0.1738		2,990.7117
Total	**2.3185**	**5.7410**	**17.9904**	**0.0338**	**2.1959**	**0.1316**	**2.3275**	**0.5877**	**0.1298**	**0.7175**	**0.0000**	**3,791.9656**	**3,791.9656**	**0.2050**	**0.0145**	**3,801.4022**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	6/1/2018	6/26/2018	5	18	
2	Building Construction	Building Construction	6/20/2017	5/7/2018	5	230	
3	Grading	Grading	6/8/2017	6/19/2017	5	8	
4	Paving	Paving	5/8/2018	5/31/2018	5	18	
5	Site Preparation	Site Preparation	6/1/2017	6/7/2017	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0.74

Residential Indoor: 116,146; Residential Outdoor: 38,715; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 2,814 (Architectural Coating – sqft)

OffRoad Equipment

Summerland Senior Living Project - San Bernardino-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading	Excavators	1	8.00	158	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	6.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	99.00	19.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	2,000.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.6630					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
Total	**20.9616**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.1171**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1301	0.0945	0.9279	2.1800e-003	0.2236	1.5500e-003	0.2251	0.0593	1.4300e-003	0.0607		216.6460	216.6460	7.8300e-003		216.8416
Total	**0.1301**	**0.0945**	**0.9279**	**2.1800e-003**	**0.2236**	**1.5500e-003**	**0.2251**	**0.0593**	**1.4300e-003**	**0.0607**		**216.6460**	**216.6460**	**7.8300e-003**		**216.8416**

3.2 Architectural Coating - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.6630					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171
Total	**20.9616**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.1171**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1301	0.0945	0.9279	2.1800e-003	0.2236	1.5500e-003	0.2251	0.0593	1.4300e-003	0.0607		216.6460	216.6460	7.8300e-003		216.8416
Total	**0.1301**	**0.0945**	**0.9279**	**2.1800e-003**	**0.2236**	**1.5500e-003**	**0.2251**	**0.0593**	**1.4300e-003**	**0.0607**		**216.6460**	**216.6460**	**7.8300e-003**		**216.8416**

3.3 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1149	26.5546	18.1825	0.0269		1.7879	1.7879		1.6791	1.6791		2,650.9797	2,650.9797	0.6531		2,667.3078
Total	**3.1149**	**26.5546**	**18.1825**	**0.0269**		**1.7879**	**1.7879**		**1.6791**	**1.6791**		**2,650.9797**	**2,650.9797**	**0.6531**		**2,667.3078**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0916	2.4755	0.6428	5.0600e-003	0.1217	0.0208	0.1425	0.0350	0.0199	0.0549		532.8926	532.8926	0.0436		533.9822
Worker	0.7211	0.5382	5.2634	0.0111	1.1066	7.9800e-003	1.1146	0.2935	7.3600e-003	0.3008		1,103.2490	1,103.2490	0.0443		1,104.3560
Total	**0.8127**	**3.0137**	**5.9062**	**0.0162**	**1.2283**	**0.0288**	**1.2571**	**0.3285**	**0.0273**	**0.3558**		**1,636.1416**	**1,636.1416**	**0.0879**		**1,638.3382**

3.3 Building Construction - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1149	26.5546	18.1825	0.0269		1.7879	1.7879		1.6791	1.6791	0.0000	2,650.9797	2,650.9797	0.6531		2,667.3078
Total	**3.1149**	**26.5546**	**18.1825**	**0.0269**		**1.7879**	**1.7879**		**1.6791**	**1.6791**	**0.0000**	**2,650.9797**	**2,650.9797**	**0.6531**		**2,667.3078**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0916	2.4755	0.6428	5.0600e-003	0.1217	0.0208	0.1425	0.0350	0.0199	0.0549		532.8926	532.8926	0.0436		533.9822
Worker	0.7211	0.5382	5.2634	0.0111	1.1066	7.9800e-003	1.1146	0.2935	7.3600e-003	0.3008		1,103.2490	1,103.2490	0.0443		1,104.3560
Total	**0.8127**	**3.0137**	**5.9062**	**0.0162**	**1.2283**	**0.0288**	**1.2571**	**0.3285**	**0.0273**	**0.3558**		**1,636.1416**	**1,636.1416**	**0.0879**		**1,638.3382**

3.3 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099		2,620.9351	2,620.9351	0.6421		2,636.9883
Total	**2.6795**	**23.3900**	**17.5804**	**0.0269**		**1.4999**	**1.4999**		**1.4099**	**1.4099**		**2,620.9351**	**2,620.9351**	**0.6421**		**2,636.9883**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0802	2.3188	0.5691	5.0500e-003	0.1217	0.0164	0.1381	0.0350	0.0157	0.0507		531.6752	531.6752	0.0417		532.7174
Worker	0.6440	0.4679	4.5931	0.0108	1.1066	7.6900e-003	1.1143	0.2935	7.0800e-003	0.3006		1,072.3976	1,072.3976	0.0387		1,073.3660
Total	**0.7241**	**2.7867**	**5.1622**	**0.0158**	**1.2283**	**0.0241**	**1.2523**	**0.3285**	**0.0228**	**0.3513**		**1,604.0728**	**1,604.0728**	**0.0804**		**1,606.0834**

3.3 Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099	0.0000	2,620.9351	2,620.9351	0.6421		2,636.9883
Total	**2.6795**	**23.3900**	**17.5804**	**0.0269**		**1.4999**	**1.4999**		**1.4099**	**1.4099**	**0.0000**	**2,620.9351**	**2,620.9351**	**0.6421**		**2,636.9883**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0802	2.3188	0.5691	5.0500e-003	0.1217	0.0164	0.1381	0.0350	0.0157	0.0507		531.6752	531.6752	0.0417		532.7174
Worker	0.6440	0.4679	4.5931	0.0108	1.1066	7.6900e-003	1.1143	0.2935	7.0800e-003	0.3006		1,072.3976	1,072.3976	0.0387		1,073.3660
Total	**0.7241**	**2.7867**	**5.1622**	**0.0158**	**1.2283**	**0.0241**	**1.2523**	**0.3285**	**0.0228**	**0.3513**		**1,604.0728**	**1,604.0728**	**0.0804**		**1,606.0834**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.0705	33.8868	17.1042	0.0297		1.7774	1.7774		1.6352	1.6352		3,037.9107	3,037.9107	0.9308		3,061.1809
Total	**3.0705**	**33.8868**	**17.1042**	**0.0297**	**6.5523**	**1.7774**	**8.3298**	**3.3675**	**1.6352**	**5.0027**		**3,037.9107**	**3,037.9107**	**0.9308**		**3,061.1809**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1093	0.0815	0.7975	1.6800e-003	0.1677	1.2100e-003	0.1689	0.0445	1.1200e-003	0.0456		167.1589	167.1589	6.7100e-003		167.3267
Total	**0.1093**	**0.0815**	**0.7975**	**1.6800e-003**	**0.1677**	**1.2100e-003**	**0.1689**	**0.0445**	**1.1200e-003**	**0.0456**		**167.1589**	**167.1589**	**6.7100e-003**		**167.3267**

3.4 Grading - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.0705	33.8868	17.1042	0.0297		1.7774	1.7774		1.6352	1.6352	0.0000	3,037.9107	3,037.9107	0.9308		3,061.1809
Total	**3.0705**	**33.8868**	**17.1042**	**0.0297**	**6.5523**	**1.7774**	**8.3298**	**3.3675**	**1.6352**	**5.0027**	**0.0000**	**3,037.9107**	**3,037.9107**	**0.9308**		**3,061.1809**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1093	0.0815	0.7975	1.6800e-003	0.1677	1.2100e-003	0.1689	0.0445	1.1200e-003	0.0456		167.1589	167.1589	6.7100e-003		167.3267
Total	**0.1093**	**0.0815**	**0.7975**	**1.6800e-003**	**0.1677**	**1.2100e-003**	**0.1689**	**0.0445**	**1.1200e-003**	**0.0456**		**167.1589**	**167.1589**	**6.7100e-003**		**167.3267**

3.5 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4239	14.5184	12.4333	0.0189		0.8370	0.8370		0.7718	0.7718		1,872.5505	1,872.5505	0.5672		1,886.7312
Paving	0.1077					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5316**	**14.5184**	**12.4333**	**0.0189**		**0.8370**	**0.8370**		**0.7718**	**0.7718**		**1,872.5505**	**1,872.5505**	**0.5672**		**1,886.7312**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1301	0.0945	0.9279	2.1800e-003	0.2236	1.5500e-003	0.2251	0.0593	1.4300e-003	0.0607		216.6460	216.6460	7.8300e-003		216.8416
Total	**0.1301**	**0.0945**	**0.9279**	**2.1800e-003**	**0.2236**	**1.5500e-003**	**0.2251**	**0.0593**	**1.4300e-003**	**0.0607**		**216.6460**	**216.6460**	**7.8300e-003**		**216.8416**

3.5 Paving - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4239	14.5184	12.4333	0.0189		0.8370	0.8370		0.7718	0.7718	0.0000	1,872.5505	1,872.5505	0.5672		1,886.7312
Paving	0.1077					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5316**	**14.5184**	**12.4333**	**0.0189**		**0.8370**	**0.8370**		**0.7718**	**0.7718**	**0.0000**	**1,872.5505**	**1,872.5505**	**0.5672**		**1,886.7312**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1301	0.0945	0.9279	2.1800e-003	0.2236	1.5500e-003	0.2251	0.0593	1.4300e-003	0.0607		216.6460	216.6460	7.8300e-003		216.8416
Total	**0.1301**	**0.0945**	**0.9279**	**2.1800e-003**	**0.2236**	**1.5500e-003**	**0.2251**	**0.0593**	**1.4300e-003**	**0.0607**		**216.6460**	**216.6460**	**7.8300e-003**		**216.8416**

3.6 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.5186	0.0000	18.5186	9.9992	0.0000	9.9992			0.0000			0.0000
Off-Road	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483		3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**18.5186**	**2.8786**	**21.3972**	**9.9992**	**2.6483**	**12.6475**		**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.4109	123.2062	20.2202	0.3155	7.0011	0.6142	7.6153	1.9196	0.5876	2.5072		33,435.1079	33,435.1079	2.0852		33,487.2381
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
Worker	0.1311	0.0979	0.9570	2.0200e-003	0.2012	1.4500e-003	0.2027	0.0534	1.3400e-003	0.0547		200.5907	200.5907	8.0500e-003		200.7920
Total	**3.5421**	**123.3040**	**21.1771**	**0.3176**	**7.2023**	**0.6156**	**7.8179**	**1.9729**	**0.5889**	**2.5619**		**33,635.6986**	**33,635.6986**	**2.0933**		**33,688.0301**

3.6 Site Preparation - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.5186	0.0000	18.5186	9.9992	0.0000	9.9992			0.0000			0.0000
Off-Road	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483	0.0000	3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**18.5186**	**2.8786**	**21.3972**	**9.9992**	**2.6483**	**12.6475**	**0.0000**	**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.4109	123.2062	20.2202	0.3155	7.0011	0.6142	7.6153	1.9196	0.5876	2.5072		33,435.1079	33,435.1079	2.0852		33,487.2381
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
Worker	0.1311	0.0979	0.9570	2.0200e-003	0.2012	1.4500e-003	0.2027	0.0534	1.3400e-003	0.0547		200.5907	200.5907	8.0500e-003		200.7920
Total	**3.5421**	**123.3040**	**21.1771**	**0.3176**	**7.2023**	**0.6156**	**7.8179**	**1.9729**	**0.5889**	**2.5619**		**33,635.6986**	**33,635.6986**	**2.0933**		**33,688.0301**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.7121	5.0171	8.6002	0.0293	2.1959	0.0316	2.2275	0.5877	0.0298	0.6175		2,986.3672	2,986.3672	0.1738		2,990.7117
Unmitigated	0.7121	5.0171	8.6002	0.0293	2.1959	0.0316	2.2275	0.5877	0.0298	0.6175		2,986.3672	2,986.3672	0.1738		2,990.7117

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Congregate Care (Assisted Living)	301.40	242.00	268.40	984,823	984,823
Enclosed Parking with Elevator	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	301.40	242.00	268.40	984,823	984,823

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Congregate Care (Assisted	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.541740	0.038987	0.178620	0.126833	0.019742	0.005671	0.017070	0.060066	0.001326	0.001715	0.006244	0.000823	0.001163
Other Asphalt Surfaces	0.541740	0.038987	0.178620	0.126833	0.019742	0.005671	0.017070	0.060066	0.001326	0.001715	0.006244	0.000823	0.001163
Congregate Care (Assisted Living)	0.541740	0.038987	0.178620	0.126833	0.019742	0.005671	0.017070	0.060066	0.001326	0.001715	0.006244	0.000823	0.001163

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0607	0.5187	0.2207	3.3100e-003		0.0419	0.0419		0.0419	0.0419		662.1837	662.1837	0.0127	0.0121	666.1187
NaturalGas Unmitigated	0.0607	0.5187	0.2207	3.3100e-003		0.0419	0.0419		0.0419	0.0419		662.1837	662.1837	0.0127	0.0121	666.1187

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Congregate Care (Assisted Living)	5628.56	0.0607	0.5187	0.2207	3.3100e-003		0.0419	0.0419		0.0419	0.0419		662.1837	662.1837	0.0127	0.0121	666.1187
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0607**	**0.5187**	**0.2207**	**3.3100e-003**		**0.0419**	**0.0419**		**0.0419**	**0.0419**		**662.1837**	**662.1837**	**0.0127**	**0.0121**	**666.1187**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Congregate Care (Assisted Living)	5.62856	0.0607	0.5187	0.2207	3.3100e-003		0.0419	0.0419		0.0419	0.0419		662.1837	662.1837	0.0127	0.0121	666.1187
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0607**	**0.5187**	**0.2207**	**3.3100e-003**		**0.0419**	**0.0419**		**0.0419**	**0.0419**		**662.1837**	**662.1837**	**0.0127**	**0.0121**	**666.1187**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.5457	0.2052	9.1696	1.1200e-003		0.0580	0.0580		0.0580	0.0580	0.0000	143.4147	143.4147	0.0185	2.3300e-003	144.5718
Unmitigated	1.5457	0.2052	9.1696	1.1200e-003		0.0580	0.0580		0.0580	0.0580	0.0000	143.4147	143.4147	0.0185	2.3300e-003	144.5718

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1019					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1523					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0117	0.0995	0.0424	6.4000e-004		8.0500e-003	8.0500e-003		8.0500e-003	8.0500e-003	0.0000	127.0588	127.0588	2.4400e-003	2.3300e-003	127.8139
Landscaping	0.2799	0.1057	9.1272	4.8000e-004		0.0500	0.0500		0.0500	0.0500		16.3559	16.3559	0.0161		16.7579
Total	**1.5457**	**0.2052**	**9.1696**	**1.1200e-003**		**0.0581**	**0.0581**		**0.0581**	**0.0581**	**0.0000**	**143.4147**	**143.4147**	**0.0185**	**2.3300e-003**	**144.5718**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1019					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1523					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0117	0.0995	0.0424	6.4000e-004		8.0500e-003	8.0500e-003		8.0500e-003	8.0500e-003	0.0000	127.0588	127.0588	2.4400e-003	2.3300e-003	127.8139
Landscaping	0.2799	0.1057	9.1272	4.8000e-004		0.0500	0.0500		0.0500	0.0500		16.3559	16.3559	0.0161		16.7579
Total	**1.5457**	**0.2052**	**9.1696**	**1.1200e-003**		**0.0581**	**0.0581**		**0.0581**	**0.0581**	**0.0000**	**143.4147**	**143.4147**	**0.0185**	**2.3300e-003**	**144.5718**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Summerland Senior Living Project

San Bernardino-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	37.00	Space	0.00	14,800.00	0
Other Asphalt Surfaces	32.10	1000sqft	0.74	32,100.00	0
Congregate Care (Assisted Living)	110.00	Dwelling Unit	2.42	57,356.00	315

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per Site Plan.

Construction Phase -

Grading -

Woodstoves - No fireplaces will be placed in the dwelling units, but six natural gas fire places will be placed in the common areas.

Summerland Senior Living Project - San Bernardino-South Coast County, Annual

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	93.50	6.00
tblFireplaces	NumberNoFireplace	11.00	104.00
tblFireplaces	NumberWood	5.50	0.00
tblGrading	MaterialExported	0.00	16,000.00
tblGrading	MaterialImported	0.00	4,000.00
tblLandUse	BuildingSpaceSquareFeet	110,000.00	57,356.00
tblLandUse	LandUseSquareFeet	110,000.00	57,356.00
tblLandUse	LotAcreage	0.33	0.00
tblLandUse	LotAcreage	6.88	2.42
tblProjectCharacteristics	OperationalYear	2018	2019
tblWoodstoves	NumberCatalytic	5.50	0.00
tblWoodstoves	NumberNoncatalytic	5.50	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.3020	2.6414	1.8706	4.0500e-003	0.1746	0.1421	0.3167	0.0659	0.1332	0.1992	0.0000	370.4620	370.4620	0.0573	0.0000	371.8956
2018	0.3566	1.3448	1.1899	2.2000e-003	0.0588	0.0783	0.1370	0.0157	0.0735	0.0893	0.0000	197.0720	197.0720	0.0348	0.0000	197.9412
Maximum	**0.3566**	**2.6414**	**1.8706**	**4.0500e-003**	**0.1746**	**0.1421**	**0.3167**	**0.0659**	**0.1332**	**0.1992**	**0.0000**	**370.4620**	**370.4620**	**0.0573**	**0.0000**	**371.8956**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.3020	2.6414	1.8706	4.0500e-003	0.1746	0.1421	0.3167	0.0659	0.1332	0.1992	0.0000	370.4618	370.4618	0.0573	0.0000	371.8953
2018	0.3566	1.3448	1.1899	2.2000e-003	0.0588	0.0783	0.1370	0.0157	0.0735	0.0893	0.0000	197.0718	197.0718	0.0348	0.0000	197.9410
Maximum	**0.3566**	**2.6414**	**1.8706**	**4.0500e-003**	**0.1746**	**0.1421**	**0.3167**	**0.0659**	**0.1332**	**0.1992**	**0.0000**	**370.4618**	**370.4618**	**0.0573**	**0.0000**	**371.8953**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-1-2017	8-31-2017	1.4889	1.4889
2	9-1-2017	11-30-2017	1.0884	1.0884
3	12-1-2017	2-28-2018	0.9941	0.9941
4	3-1-2018	5-31-2018	0.8576	0.8576
5	6-1-2018	8-31-2018	0.2153	0.2153
		Highest	1.4889	1.4889

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	0.2640	0.0145	1.1414	7.0000e-005		6.3500e-003	6.3500e-003		6.3500e-003	6.3500e-003	0.0000	3.2956	3.2956	1.8500e-003	3.0000e-005	3.3497
Energy	0.0111	0.0947	0.0403	6.0000e-004		7.6500e-003	7.6500e-003		7.6500e-003	7.6500e-003	0.0000	314.1712	314.1712	0.0106	3.7600e-003	315.5545
Mobile	0.1212	0.8940	1.5483	5.2100e-003	0.3750	5.4600e-003	0.3805	0.1005	5.1500e-003	0.1057	0.0000	480.9964	480.9964	0.0271	0.0000	481.6726
Waste						0.0000	0.0000		0.0000	0.0000	20.3762	0.0000	20.3762	1.2042	0.0000	50.4813
Water						0.0000	0.0000		0.0000	0.0000	2.2737	45.7282	48.0020	0.2354	5.9000e-003	55.6472
Total	**0.3963**	**1.0031**	**2.7300**	**5.8800e-003**	**0.3750**	**0.0195**	**0.3945**	**0.1005**	**0.0192**	**0.1197**	**22.6500**	**844.1913**	**866.8413**	**1.4791**	**9.6900e-003**	**906.7052**

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	0.2640	0.0145	1.1414	7.0000e-005		6.3500e-003	6.3500e-003		6.3500e-003	6.3500e-003	0.0000	3.2956	3.2956	1.8500e-003	3.0000e-005	3.3497
Energy	0.0111	0.0947	0.0403	6.0000e-004		7.6500e-003	7.6500e-003		7.6500e-003	7.6500e-003	0.0000	314.1712	314.1712	0.0106	3.7600e-003	315.5545
Mobile	0.1212	0.8940	1.5483	5.2100e-003	0.3750	5.4600e-003	0.3805	0.1005	5.1500e-003	0.1057	0.0000	480.9964	480.9964	0.0271	0.0000	481.6726
Waste						0.0000	0.0000		0.0000	0.0000	20.3762	0.0000	20.3762	1.2042	0.0000	50.4813
Water						0.0000	0.0000		0.0000	0.0000	2.2737	45.7282	48.0020	0.2354	5.9000e-003	55.6472
Total	**0.3963**	**1.0031**	**2.7300**	**5.8800e-003**	**0.3750**	**0.0195**	**0.3945**	**0.1005**	**0.0192**	**0.1197**	**22.6500**	**844.1913**	**866.8413**	**1.4791**	**9.6900e-003**	**906.7052**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Summerland Senior Living Project - San Bernardino-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	6/1/2018	6/26/2018	5	18	
2	Building Construction	Building Construction	6/20/2017	5/7/2018	5	230	
3	Grading	Grading	6/8/2017	6/19/2017	5	8	
4	Paving	Paving	5/8/2018	5/31/2018	5	18	
5	Site Preparation	Site Preparation	6/1/2017	6/7/2017	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0.74

Residential Indoor: 116,146; Residential Outdoor: 38,715; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 2,814 (Architectural Coating – sqft)

OffRoad Equipment

Summerland Senior Living Project - San Bernardino-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading	Excavators	1	8.00	158	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	6.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	99.00	19.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	2,000.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2018

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	0.1860					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6900e-003	0.0181	0.0167	3.0000e-005		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003	0.0000	2.2979	2.2979	2.2000e-004	0.0000	2.3034
Total	**0.1887**	**0.0181**	**0.0167**	**3.0000e-005**		**1.3500e-003**	**1.3500e-003**		**1.3500e-003**	**1.3500e-003**	**0.0000**	**2.2979**	**2.2979**	**2.2000e-004**	**0.0000**	**2.3034**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0600e-003	9.0000e-004	8.7700e-003	2.0000e-005	1.9700e-003	1.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.8076	1.8076	7.0000e-005	0.0000	1.8093
Total	**1.0600e-003**	**9.0000e-004**	**8.7700e-003**	**2.0000e-005**	**1.9700e-003**	**1.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.8076**	**1.8076**	**7.0000e-005**	**0.0000**	**1.8093**

3.2 Architectural Coating - 2018

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	0.1860					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6900e-003	0.0181	0.0167	3.0000e-005		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003	0.0000	2.2979	2.2979	2.2000e-004	0.0000	2.3034
Total	**0.1887**	**0.0181**	**0.0167**	**3.0000e-005**		**1.3500e-003**	**1.3500e-003**		**1.3500e-003**	**1.3500e-003**	**0.0000**	**2.2979**	**2.2979**	**2.2000e-004**	**0.0000**	**2.3034**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0600e-003	9.0000e-004	8.7700e-003	2.0000e-005	1.9700e-003	1.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.8076	1.8076	7.0000e-005	0.0000	1.8093
Total	**1.0600e-003**	**9.0000e-004**	**8.7700e-003**	**2.0000e-005**	**1.9700e-003**	**1.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.8076**	**1.8076**	**7.0000e-005**	**0.0000**	**1.8093**

3.3 Building Construction - 2017

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	0.2165	1.8455	1.2637	1.8700e-003		0.1243	0.1243		0.1167	0.1167	0.0000	167.1425	167.1425	0.0412	0.0000	168.1720
Total	**0.2165**	**1.8455**	**1.2637**	**1.8700e-003**		**0.1243**	**0.1243**		**0.1167**	**0.1167**	**0.0000**	**167.1425**	**167.1425**	**0.0412**	**0.0000**	**168.1720**

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	6.2000e-003	0.1755	0.0424	3.6000e-004	8.3300e-003	1.4400e-003	9.7600e-003	2.4000e-003	1.3700e-003	3.7800e-003	0.0000	34.3518	34.3518	2.6200e-003	0.0000	34.4174
Worker	0.0456	0.0394	0.3844	7.9000e-004	0.0754	5.5000e-004	0.0760	0.0200	5.1000e-004	0.0206	0.0000	71.0802	71.0802	2.8700e-003	0.0000	71.1520
Total	**0.0518**	**0.2149**	**0.4268**	**1.1500e-003**	**0.0838**	**1.9900e-003**	**0.0858**	**0.0224**	**1.8800e-003**	**0.0243**	**0.0000**	**105.4320**	**105.4320**	**5.4900e-003**	**0.0000**	**105.5694**

3.3 Building Construction - 2017

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	0.2165	1.8455	1.2637	1.8700e-003		0.1243	0.1243		0.1167	0.1167	0.0000	167.1423	167.1423	0.0412	0.0000	168.1718
Total	**0.2165**	**1.8455**	**1.2637**	**1.8700e-003**		**0.1243**	**0.1243**		**0.1167**	**0.1167**	**0.0000**	**167.1423**	**167.1423**	**0.0412**	**0.0000**	**168.1718**

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	6.2000e-003	0.1755	0.0424	3.6000e-004	8.3300e-003	1.4400e-003	9.7600e-003	2.4000e-003	1.3700e-003	3.7800e-003	0.0000	34.3518	34.3518	2.6200e-003	0.0000	34.4174
Worker	0.0456	0.0394	0.3844	7.9000e-004	0.0754	5.5000e-004	0.0760	0.0200	5.1000e-004	0.0206	0.0000	71.0802	71.0802	2.8700e-003	0.0000	71.1520
Total	**0.0518**	**0.2149**	**0.4268**	**1.1500e-003**	**0.0838**	**1.9900e-003**	**0.0858**	**0.0224**	**1.8800e-003**	**0.0243**	**0.0000**	**105.4320**	**105.4320**	**5.4900e-003**	**0.0000**	**105.5694**

3.3 Building Construction - 2018

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	0.1219	1.0643	0.7999	1.2200e-003		0.0682	0.0682		0.0642	0.0642	0.0000	108.1841	108.1841	0.0265	0.0000	108.8467
Total	**0.1219**	**1.0643**	**0.7999**	**1.2200e-003**		**0.0682**	**0.0682**		**0.0642**	**0.0642**	**0.0000**	**108.1841**	**108.1841**	**0.0265**	**0.0000**	**108.8467**

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	3.5500e-003	0.1077	0.0245	2.3000e-004	5.4500e-003	7.4000e-004	6.1900e-003	1.5700e-003	7.1000e-004	2.2800e-003	0.0000	22.4507	22.4507	1.6400e-003	0.0000	22.4916
Worker	0.0266	0.0224	0.2194	5.0000e-004	0.0494	3.5000e-004	0.0497	0.0131	3.2000e-004	0.0134	0.0000	45.2353	45.2353	1.6400e-003	0.0000	45.2764
Total	**0.0302**	**0.1301**	**0.2439**	**7.3000e-004**	**0.0548**	**1.0900e-003**	**0.0559**	**0.0147**	**1.0300e-003**	**0.0157**	**0.0000**	**67.6860**	**67.6860**	**3.2800e-003**	**0.0000**	**67.7680**

3.3 Building Construction - 2018

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	0.1219	1.0642	0.7999	1.2200e-003		0.0682	0.0682		0.0642	0.0642	0.0000	108.1840	108.1840	0.0265	0.0000	108.8466
Total	**0.1219**	**1.0642**	**0.7999**	**1.2200e-003**		**0.0682**	**0.0682**		**0.0642**	**0.0642**	**0.0000**	**108.1840**	**108.1840**	**0.0265**	**0.0000**	**108.8466**

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	3.5500e-003	0.1077	0.0245	2.3000e-004	5.4500e-003	7.4000e-004	6.1900e-003	1.5700e-003	7.1000e-004	2.2800e-003	0.0000	22.4507	22.4507	1.6400e-003	0.0000	22.4916
Worker	0.0266	0.0224	0.2194	5.0000e-004	0.0494	3.5000e-004	0.0497	0.0131	3.2000e-004	0.0134	0.0000	45.2353	45.2353	1.6400e-003	0.0000	45.2764
Total	**0.0302**	**0.1301**	**0.2439**	**7.3000e-004**	**0.0548**	**1.0900e-003**	**0.0559**	**0.0147**	**1.0300e-003**	**0.0157**	**0.0000**	**67.6860**	**67.6860**	**3.2800e-003**	**0.0000**	**67.7680**

3.4 Grading - 2017

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					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0123	0.1356	0.0684	1.2000e-004		7.1100e-003	7.1100e-003		6.5400e-003	6.5400e-003	0.0000	11.0238	11.0238	3.3800e-003	0.0000	11.1082
Total	**0.0123**	**0.1356**	**0.0684**	**1.2000e-004**	**0.0262**	**7.1100e-003**	**0.0333**	**0.0135**	**6.5400e-003**	**0.0200**	**0.0000**	**11.0238**	**11.0238**	**3.3800e-003**	**0.0000**	**11.1082**

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-004	3.4000e-004	3.3500e-003	1.0000e-005	6.6000e-004	0.0000	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.6198	0.6198	3.0000e-005	0.0000	0.6205
Total	**4.0000e-004**	**3.4000e-004**	**3.3500e-003**	**1.0000e-005**	**6.6000e-004**	**0.0000**	**6.6000e-004**	**1.7000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**0.6198**	**0.6198**	**3.0000e-005**	**0.0000**	**0.6205**

3.4 Grading - 2017

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					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0123	0.1356	0.0684	1.2000e-004		7.1100e-003	7.1100e-003		6.5400e-003	6.5400e-003	0.0000	11.0238	11.0238	3.3800e-003	0.0000	11.1082
Total	**0.0123**	**0.1356**	**0.0684**	**1.2000e-004**	**0.0262**	**7.1100e-003**	**0.0333**	**0.0135**	**6.5400e-003**	**0.0200**	**0.0000**	**11.0238**	**11.0238**	**3.3800e-003**	**0.0000**	**11.1082**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	3.4000e-004	3.3500e-003	1.0000e-005	6.6000e-004	0.0000	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.6198	0.6198	3.0000e-005	0.0000	0.6205
Total	**4.0000e-004**	**3.4000e-004**	**3.3500e-003**	**1.0000e-005**	**6.6000e-004**	**0.0000**	**6.6000e-004**	**1.7000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**0.6198**	**0.6198**	**3.0000e-005**	**0.0000**	**0.6205**

3.5 Paving - 2018

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	0.0128	0.1307	0.1119	1.7000e-004		7.5300e-003	7.5300e-003		6.9500e-003	6.9500e-003	0.0000	15.2887	15.2887	4.6300e-003	0.0000	15.4045
Paving	9.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0138**	**0.1307**	**0.1119**	**1.7000e-004**		**7.5300e-003**	**7.5300e-003**		**6.9500e-003**	**6.9500e-003**	**0.0000**	**15.2887**	**15.2887**	**4.6300e-003**	**0.0000**	**15.4045**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0600e-003	9.0000e-004	8.7700e-003	2.0000e-005	1.9700e-003	1.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.8076	1.8076	7.0000e-005	0.0000	1.8093
Total	**1.0600e-003**	**9.0000e-004**	**8.7700e-003**	**2.0000e-005**	**1.9700e-003**	**1.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.8076**	**1.8076**	**7.0000e-005**	**0.0000**	**1.8093**

3.5 Paving - 2018

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	0.0128	0.1307	0.1119	1.7000e-004		7.5300e-003	7.5300e-003		6.9500e-003	6.9500e-003	0.0000	15.2887	15.2887	4.6300e-003	0.0000	15.4045
Paving	9.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0138**	**0.1307**	**0.1119**	**1.7000e-004**		**7.5300e-003**	**7.5300e-003**		**6.9500e-003**	**6.9500e-003**	**0.0000**	**15.2887**	**15.2887**	**4.6300e-003**	**0.0000**	**15.4045**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0600e-003	9.0000e-004	8.7700e-003	2.0000e-005	1.9700e-003	1.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.8076	1.8076	7.0000e-005	0.0000	1.8093
Total	**1.0600e-003**	**9.0000e-004**	**8.7700e-003**	**2.0000e-005**	**1.9700e-003**	**1.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.8076**	**1.8076**	**7.0000e-005**	**0.0000**	**1.8093**

3.6 Site Preparation - 2017

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					0.0463	0.0000	0.0463	0.0250	0.0000	0.0250	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0124	0.1307	0.0586	1.0000e-004		7.2000e-003	7.2000e-003		6.6200e-003	6.6200e-003	0.0000	8.8336	8.8336	2.7100e-003	0.0000	8.9013
Total	**0.0124**	**0.1307**	**0.0586**	**1.0000e-004**	**0.0463**	**7.2000e-003**	**0.0535**	**0.0250**	**6.6200e-003**	**0.0316**	**0.0000**	**8.8336**	**8.8336**	**2.7100e-003**	**0.0000**	**8.9013**

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	8.3400e-003	0.3141	0.0472	8.0000e-004	0.0172	1.5200e-003	0.0187	4.7300e-003	1.4600e-003	6.1800e-003	0.0000	76.9454	76.9454	4.5400e-003	0.0000	77.0588
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	2.6000e-004	2.5100e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4649	0.4649	2.0000e-005	0.0000	0.4654
Total	**8.6400e-003**	**0.3144**	**0.0497**	**8.1000e-004**	**0.0177**	**1.5200e-003**	**0.0192**	**4.8600e-003**	**1.4600e-003**	**6.3100e-003**	**0.0000**	**77.4102**	**77.4102**	**4.5600e-003**	**0.0000**	**77.5242**

3.6 Site Preparation - 2017

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					0.0463	0.0000	0.0463	0.0250	0.0000	0.0250	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0124	0.1307	0.0586	1.0000e-004		7.2000e-003	7.2000e-003		6.6200e-003	6.6200e-003	0.0000	8.8336	8.8336	2.7100e-003	0.0000	8.9013
Total	**0.0124**	**0.1307**	**0.0586**	**1.0000e-004**	**0.0463**	**7.2000e-003**	**0.0535**	**0.0250**	**6.6200e-003**	**0.0316**	**0.0000**	**8.8336**	**8.8336**	**2.7100e-003**	**0.0000**	**8.9013**

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	8.3400e-003	0.3141	0.0472	8.0000e-004	0.0172	1.5200e-003	0.0187	4.7300e-003	1.4600e-003	6.1800e-003	0.0000	76.9454	76.9454	4.5400e-003	0.0000	77.0588
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	2.6000e-004	2.5100e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4649	0.4649	2.0000e-005	0.0000	0.4654
Total	**8.6400e-003**	**0.3144**	**0.0497**	**8.1000e-004**	**0.0177**	**1.5200e-003**	**0.0192**	**4.8600e-003**	**1.4600e-003**	**6.3100e-003**	**0.0000**	**77.4102**	**77.4102**	**4.5600e-003**	**0.0000**	**77.5242**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1212	0.8940	1.5483	5.2100e-003	0.3750	5.4600e-003	0.3805	0.1005	5.1500e-003	0.1057	0.0000	480.9964	480.9964	0.0271	0.0000	481.6726
Unmitigated	0.1212	0.8940	1.5483	5.2100e-003	0.3750	5.4600e-003	0.3805	0.1005	5.1500e-003	0.1057	0.0000	480.9964	480.9964	0.0271	0.0000	481.6726

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Congregate Care (Assisted Living)	301.40	242.00	268.40	984,823	984,823
Enclosed Parking with Elevator	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	301.40	242.00	268.40	984,823	984,823

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Congregate Care (Assisted	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.541740	0.038987	0.178620	0.126833	0.019742	0.005671	0.017070	0.060066	0.001326	0.001715	0.006244	0.000823	0.001163
Other Asphalt Surfaces	0.541740	0.038987	0.178620	0.126833	0.019742	0.005671	0.017070	0.060066	0.001326	0.001715	0.006244	0.000823	0.001163
Congregate Care (Assisted Living)	0.541740	0.038987	0.178620	0.126833	0.019742	0.005671	0.017070	0.060066	0.001326	0.001715	0.006244	0.000823	0.001163

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	204.5393	204.5393	8.4400e-003	1.7500e-003	205.2710
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	204.5393	204.5393	8.4400e-003	1.7500e-003	205.2710
NaturalGas Mitigated	0.0111	0.0947	0.0403	6.0000e-004		7.6500e-003	7.6500e-003		7.6500e-003	7.6500e-003	0.0000	109.6319	109.6319	2.1000e-003	2.0100e-003	110.2834
NaturalGas Unmitigated	0.0111	0.0947	0.0403	6.0000e-004		7.6500e-003	7.6500e-003		7.6500e-003	7.6500e-003	0.0000	109.6319	109.6319	2.1000e-003	2.0100e-003	110.2834

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Congregate Care (Assisted Living)	2.05442e+006	0.0111	0.0947	0.0403	6.0000e-004		7.6500e-003	7.6500e-003		7.6500e-003	7.6500e-003	0.0000	109.6319	109.6319	2.1000e-003	2.0100e-003	110.2834
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0111**	**0.0947**	**0.0403**	**6.0000e-004**		**7.6500e-003**	**7.6500e-003**		**7.6500e-003**	**7.6500e-003**	**0.0000**	**109.6319**	**109.6319**	**2.1000e-003**	**2.0100e-003**	**110.2834**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Congregate Care (Assisted Living)	2.05442e+006	0.0111	0.0947	0.0403	6.0000e-004		7.6500e-003	7.6500e-003		7.6500e-003	7.6500e-003	0.0000	109.6319	109.6319	2.1000e-003	2.0100e-003	110.2834
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0111**	**0.0947**	**0.0403**	**6.0000e-004**		**7.6500e-003**	**7.6500e-003**		**7.6500e-003**	**7.6500e-003**	**0.0000**	**109.6319**	**109.6319**	**2.1000e-003**	**2.0100e-003**	**110.2834**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Congregate Care (Assisted Living)	542199	172.7562	7.1300e-003	1.4800e-003	173.3742
Enclosed Parking with Elevator	99752	31.7831	1.3100e-003	2.7000e-004	31.8968
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**204.5393**	**8.4400e-003**	**1.7500e-003**	**205.2710**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Congregate Care (Assisted Living)	542199	172.7562	7.1300e-003	1.4800e-003	173.3742
Enclosed Parking with Elevator	99752	31.7831	1.3100e-003	2.7000e-004	31.8968
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**204.5393**	**8.4400e-003**	**1.7500e-003**	**205.2710**

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	0.2640	0.0145	1.1414	7.0000e-005		6.3500e-003	6.3500e-003		6.3500e-003	6.3500e-003	0.0000	3.2956	3.2956	1.8500e-003	3.0000e-005	3.3497
Unmitigated	0.2640	0.0145	1.1414	7.0000e-005		6.3500e-003	6.3500e-003		6.3500e-003	6.3500e-003	0.0000	3.2956	3.2956	1.8500e-003	3.0000e-005	3.3497

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	0.0186					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2103					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.5000e-004	1.2400e-003	5.3000e-004	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	1.4408	1.4408	3.0000e-005	3.0000e-005	1.4494
Landscaping	0.0350	0.0132	1.1409	6.0000e-005		6.2500e-003	6.2500e-003		6.2500e-003	6.2500e-003	0.0000	1.8547	1.8547	1.8200e-003	0.0000	1.9003
Total	**0.2640**	**0.0145**	**1.1414**	**7.0000e-005**		**6.3500e-003**	**6.3500e-003**		**6.3500e-003**	**6.3500e-003**	**0.0000**	**3.2956**	**3.2956**	**1.8500e-003**	**3.0000e-005**	**3.3497**

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	0.0186					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2103					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.5000e-004	1.2400e-003	5.3000e-004	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	1.4408	1.4408	3.0000e-005	3.0000e-005	1.4494
Landscaping	0.0350	0.0132	1.1409	6.0000e-005		6.2500e-003	6.2500e-003		6.2500e-003	6.2500e-003	0.0000	1.8547	1.8547	1.8200e-003	0.0000	1.9003
Total	**0.2640**	**0.0145**	**1.1414**	**7.0000e-005**		**6.3500e-003**	**6.3500e-003**		**6.3500e-003**	**6.3500e-003**	**0.0000**	**3.2956**	**3.2956**	**1.8500e-003**	**3.0000e-005**	**3.3497**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	48.0020	0.2354	5.9000e-003	55.6472
Unmitigated	48.0020	0.2354	5.9000e-003	55.6472

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Congregate Care (Assisted Living)	7.16694 / 4.51829	48.0020	0.2354	5.9000e-003	55.6472
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**48.0020**	**0.2354**	**5.9000e-003**	**55.6472**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Congregate Care (Assisted Living)	7.16694 / 4.51829	48.0020	0.2354	5.9000e-003	55.6472
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**48.0020**	**0.2354**	**5.9000e-003**	**55.6472**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	20.3762	1.2042	0.0000	50.4813
Unmitigated	20.3762	1.2042	0.0000	50.4813

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Congregate Care (Assisted Living)	100.38	20.3762	1.2042	0.0000	50.4813
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**20.3762**	**1.2042**	**0.0000**	**50.4813**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Congregate Care (Assisted Living)	100.38	20.3762	1.2042	0.0000	50.4813
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**20.3762**	**1.2042**	**0.0000**	**50.4813**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Appendix B

Project
Emission Calculations Output With Mitigation
(CalEEMod)

Summerland Senior Living Project With Mitigation

San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	37.00	Space	0.00	14,800.00	0
Other Asphalt Surfaces	32.10	1000sqft	0.74	32,100.00	0
Congregate Care (Assisted Living)	110.00	Dwelling Unit	2.42	57,356.00	315

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per Site Plan.

Construction Phase - Site Preparation and Grading to extend over a period of ten (10) days.

Grading -

Woodstoves - No fireplaces will be placed in the dwelling units, but six natural gas fire places will be placed in the common areas.

Construction Off-road Equipment Mitigation - Project will be required to comply with SCAQMD Rule 403 regrading fugitive dust control.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Vehicle Trips - Trips rates have been adjusted to reflect trip generation based off the traffic study which utilizes occupied beds as size metric.

Water And Wastewater -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	25
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	8.00	10.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	PhaseEndDate	6/26/2018	7/5/2018
tblConstructionPhase	PhaseEndDate	5/7/2018	5/16/2018
tblConstructionPhase	PhaseEndDate	6/19/2017	6/28/2017
tblConstructionPhase	PhaseEndDate	5/31/2018	6/11/2018
tblConstructionPhase	PhaseEndDate	6/7/2017	6/14/2017
tblConstructionPhase	PhaseStartDate	6/1/2018	6/12/2018
tblConstructionPhase	PhaseStartDate	6/20/2017	6/29/2017
tblConstructionPhase	PhaseStartDate	6/8/2017	6/15/2017

tblConstructionPhase	PhaseStartDate	5/8/2018	5/17/2018
tblFireplaces	NumberGas	93.50	6.00
tblFireplaces	NumberNoFireplace	11.00	104.00
tblFireplaces	NumberWood	5.50	0.00
tblGrading	MaterialExported	0.00	8,000.00
tblGrading	MaterialExported	0.00	8,000.00
tblGrading	MaterialImported	0.00	2,000.00
tblGrading	MaterialImported	0.00	2,000.00
tblLandUse	BuildingSpaceSquareFeet	110,000.00	57,356.00
tblLandUse	LandUseSquareFeet	110,000.00	57,356.00
tblLandUse	LotAcreage	0.33	0.00
tblLandUse	LotAcreage	6.88	2.42
tblProjectCharacteristics	OperationalYear	2018	2019
tblVehicleTrips	ST_TR	2.20	2.76
tblVehicleTrips	SU_TR	2.44	3.06
tblVehicleTrips	WD_TR	2.74	3.44
tblWoodstoves	NumberCatalytic	5.50	0.00
tblWoodstoves	NumberNoncatalytic	5.50	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	5.9117	82.8853	29.0596	0.1212	20.1308	3.0314	23.1622	10.4811	2.7945	13.2755	0.0000	12,689.3284	12,689.3284	1.6854	0.0000	12,731.4626
2018	21.0921	26.1629	23.6471	0.0442	1.2283	1.5237	2.7520	0.3285	1.4325	1.7610	0.0000	4,369.0488	4,369.0488	0.7241	0.0000	4,387.1504
Maximum	**21.0921**	**82.8853**	**29.0596**	**0.1212**	**20.1308**	**3.0314**	**23.1622**	**10.4811**	**2.7945**	**13.2755**	**0.0000**	**12,689.3284**	**12,689.3284**	**1.6854**	**0.0000**	**12,731.4626**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	5.9117	82.8853	29.0596	0.1212	7.9779	3.0314	11.0093	3.8310	2.7945	6.6254	0.0000	12,689.3284	12,689.3284	1.6854	0.0000	12,731.4626
2018	21.0921	26.1629	23.6471	0.0442	1.2283	1.5237	2.7520	0.3285	1.4325	1.7610	0.0000	4,369.0488	4,369.0488	0.7241	0.0000	4,387.1504
Maximum	**21.0921**	**82.8853**	**29.0596**	**0.1212**	**7.9779**	**3.0314**	**11.0093**	**3.8310**	**2.7945**	**6.6254**	**0.0000**	**12,689.3284**	**12,689.3284**	**1.6854**	**0.0000**	**12,731.4626**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**56.90**	**0.00**	**46.90**	**61.52**	**0.00**	**44.23**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.5457	0.2052	9.1696	1.1200e-003		0.0580	0.0580		0.0580	0.0580	0.0000	143.4147	143.4147	0.0185	2.3300e-003	144.5718
Energy	0.0607	0.5187	0.2207	3.3100e-003		0.0419	0.0419		0.0419	0.0419		662.1837	662.1837	0.0127	0.0121	666.1187
Mobile	1.0187	6.2510	12.3123	0.0400	2.7569	0.0393	2.7962	0.7378	0.0371	0.7749		4,068.4986	4,068.4986	0.2173		4,073.9312
Total	**2.6251**	**6.9750**	**21.7026**	**0.0444**	**2.7569**	**0.1393**	**2.8962**	**0.7378**	**0.1370**	**0.8749**	**0.0000**	**4,874.0970**	**4,874.0970**	**0.2485**	**0.0145**	**4,884.6217**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.5457	0.2052	9.1696	1.1200e-003		0.0580	0.0580		0.0580	0.0580	0.0000	143.4147	143.4147	0.0185	2.3300e-003	144.5718
Energy	0.0607	0.5187	0.2207	3.3100e-003		0.0419	0.0419		0.0419	0.0419		662.1837	662.1837	0.0127	0.0121	666.1187
Mobile	1.0187	6.2510	12.3123	0.0400	2.7569	0.0393	2.7962	0.7378	0.0371	0.7749		4,068.4986	4,068.4986	0.2173		4,073.9312
Total	**2.6251**	**6.9750**	**21.7026**	**0.0444**	**2.7569**	**0.1393**	**2.8962**	**0.7378**	**0.1370**	**0.8749**	**0.0000**	**4,874.0970**	**4,874.0970**	**0.2485**	**0.0145**	**4,884.6217**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2017	6/14/2017	5	10	
2	Grading	Grading	6/15/2017	6/28/2017	5	10	
3	Building Construction	Building Construction	6/29/2017	5/16/2018	5	230	
4	Paving	Paving	5/17/2018	6/11/2018	5	18	
5	Architectural Coating	Architectural Coating	6/12/2018	7/5/2018	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 5

Acres of Paving: 0.74

Residential Indoor: 116,146; Residential Outdoor: 38,715; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 2,814 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading	Excavators	1	8.00	158	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	6.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	99.00	19.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	1,000.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	1,000.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.1794	0.0000	18.1794	9.9478	0.0000	9.9478			0.0000			0.0000
Off-Road	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483		3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**18.1794**	**2.8786**	**21.0579**	**9.9478**	**2.6483**	**12.5961**		**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

3.2 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.8194	30.5172	4.4482	0.0809	1.7503	0.1514	1.9017	0.4799	0.1449	0.6247		8,570.8400	8,570.8400	0.4828		8,582.9110
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
Worker	0.1315	0.0928	1.1561	2.2500e-003	0.2012	1.4500e-003	0.2027	0.0534	1.3400e-003	0.0547		223.5383	223.5383	9.1200e-003		223.7664
Total	**0.9509**	**30.6099**	**5.6042**	**0.0831**	**1.9515**	**0.1529**	**2.1043**	**0.5333**	**0.1462**	**0.6794**		**8,794.3783**	**8,794.3783**	**0.4920**		**8,806.6774**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0265	0.0000	6.0265	3.2977	0.0000	3.2977			0.0000			0.0000
Off-Road	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483	0.0000	3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**6.0265**	**2.8786**	**8.9050**	**3.2977**	**2.6483**	**5.9460**	**0.0000**	**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

3.2 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.8194	30.5172	4.4482	0.0809	1.7503	0.1514	1.9017	0.4799	0.1449	0.6247		8,570.8400	8,570.8400	0.4828		8,582.9110
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
Worker	0.1315	0.0928	1.1561	2.2500e-003	0.2012	1.4500e-003	0.2027	0.0534	1.3400e-003	0.0547		223.5383	223.5383	9.1200e-003		223.7664
Total	**0.9509**	**30.6099**	**5.6042**	**0.0831**	**1.9515**	**0.1529**	**2.1043**	**0.5333**	**0.1462**	**0.6794**		**8,794.3783**	**8,794.3783**	**0.4920**		**8,806.6774**

3.3 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.6654	0.0000	6.6654	3.3846	0.0000	3.3846			0.0000			0.0000
Off-Road	3.0705	33.8868	17.1042	0.0297		1.7774	1.7774		1.6352	1.6352		3,037.9107	3,037.9107	0.9308		3,061.1809
Total	**3.0705**	**33.8868**	**17.1042**	**0.0297**	**6.6654**	**1.7774**	**8.4429**	**3.3846**	**1.6352**	**5.0199**		**3,037.9107**	**3,037.9107**	**0.9308**		**3,061.1809**

3.3 Grading - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.8194	30.5172	4.4482	0.0809	1.7503	0.1514	1.9017	0.4799	0.1449	0.6247		8,570.8400	8,570.8400	0.4828		8,582.9110
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
Worker	0.1096	0.0773	0.9634	1.8800e-003	0.1677	1.2100e-003	0.1689	0.0445	1.1200e-003	0.0456		186.2819	186.2819	7.6000e-003		186.4720
Total	**0.9290**	**30.5945**	**5.4115**	**0.0828**	**1.9179**	**0.1526**	**2.0705**	**0.5244**	**0.1460**	**0.6703**		**8,757.1219**	**8,757.1219**	**0.4904**		**8,769.3830**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2096	0.0000	2.2096	1.1220	0.0000	1.1220			0.0000			0.0000
Off-Road	3.0705	33.8868	17.1042	0.0297		1.7774	1.7774		1.6352	1.6352	0.0000	3,037.9107	3,037.9107	0.9308		3,061.1809
Total	**3.0705**	**33.8868**	**17.1042**	**0.0297**	**2.2096**	**1.7774**	**3.9870**	**1.1220**	**1.6352**	**2.7572**	**0.0000**	**3,037.9107**	**3,037.9107**	**0.9308**		**3,061.1809**

3.3 Grading - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.8194	30.5172	4.4482	0.0809	1.7503	0.1514	1.9017	0.4799	0.1449	0.6247		8,570.8400	8,570.8400	0.4828		8,582.9110
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
Worker	0.1096	0.0773	0.9634	1.8800e-003	0.1677	1.2100e-003	0.1689	0.0445	1.1200e-003	0.0456		186.2819	186.2819	7.6000e-003		186.4720
Total	**0.9290**	**30.5945**	**5.4115**	**0.0828**	**1.9179**	**0.1526**	**2.0705**	**0.5244**	**0.1460**	**0.6703**		**8,757.1219**	**8,757.1219**	**0.4904**		**8,769.3830**

3.4 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1149	26.5546	18.1825	0.0269		1.7879	1.7879		1.6791	1.6791		2,650.9797	2,650.9797	0.6531		2,667.3078
Total	**3.1149**	**26.5546**	**18.1825**	**0.0269**		**1.7879**	**1.7879**		**1.6791**	**1.6791**		**2,650.9797**	**2,650.9797**	**0.6531**		**2,667.3078**

3.4 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0878	2.4816	0.5716	5.2600e-003	0.1217	0.0206	0.1422	0.0350	0.0197	0.0547		553.4925	553.4925	0.0398		554.4883
Worker	0.7233	0.5102	6.3583	0.0124	1.1066	7.9800e-003	1.1146	0.2935	7.3600e-003	0.3008		1,229.4608	1,229.4608	0.0502		1,230.7152
Total	**0.8112**	**2.9917**	**6.9299**	**0.0176**	**1.2283**	**0.0285**	**1.2568**	**0.3285**	**0.0270**	**0.3555**		**1,782.9533**	**1,782.9533**	**0.0900**		**1,785.2036**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1149	26.5546	18.1825	0.0269		1.7879	1.7879		1.6791	1.6791	0.0000	2,650.9797	2,650.9797	0.6531		2,667.3078
Total	**3.1149**	**26.5546**	**18.1825**	**0.0269**		**1.7879**	**1.7879**		**1.6791**	**1.6791**	**0.0000**	**2,650.9797**	**2,650.9797**	**0.6531**		**2,667.3078**

3.4 Building Construction - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0878	2.4816	0.5716	5.2600e-003	0.1217	0.0206	0.1422	0.0350	0.0197	0.0547		553.4925	553.4925	0.0398		554.4883
Worker	0.7233	0.5102	6.3583	0.0124	1.1066	7.9800e-003	1.1146	0.2935	7.3600e-003	0.3008		1,229.4608	1,229.4608	0.0502		1,230.7152
Total	**0.8112**	**2.9917**	**6.9299**	**0.0176**	**1.2283**	**0.0285**	**1.2568**	**0.3285**	**0.0270**	**0.3555**		**1,782.9533**	**1,782.9533**	**0.0900**		**1,785.2036**

3.4 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099		2,620.9351	2,620.9351	0.6421		2,636.9883
Total	**2.6795**	**23.3900**	**17.5804**	**0.0269**		**1.4999**	**1.4999**		**1.4099**	**1.4099**		**2,620.9351**	**2,620.9351**	**0.6421**		**2,636.9883**

3.4 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0766	2.3288	0.5000	5.2500e-003	0.1217	0.0162	0.1379	0.0350	0.0155	0.0505		552.7593	552.7593	0.0379		553.7066
Worker	0.6459	0.4441	5.5667	0.0120	1.1066	7.6900e-003	1.1143	0.2935	7.0800e-003	0.3006		1,195.3544	1,195.3544	0.0440		1,196.4555
Total	**0.7224**	**2.7729**	**6.0667**	**0.0173**	**1.2283**	**0.0239**	**1.2521**	**0.3285**	**0.0226**	**0.3511**		**1,748.1137**	**1,748.1137**	**0.0819**		**1,750.1621**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099	0.0000	2,620.9351	2,620.9351	0.6421		2,636.9883
Total	**2.6795**	**23.3900**	**17.5804**	**0.0269**		**1.4999**	**1.4999**		**1.4099**	**1.4099**	**0.0000**	**2,620.9351**	**2,620.9351**	**0.6421**		**2,636.9883**

3.4 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0766	2.3288	0.5000	5.2500e-003	0.1217	0.0162	0.1379	0.0350	0.0155	0.0505		552.7593	552.7593	0.0379		553.7066
Worker	0.6459	0.4441	5.5667	0.0120	1.1066	7.6900e-003	1.1143	0.2935	7.0800e-003	0.3006		1,195.3544	1,195.3544	0.0440		1,196.4555
Total	**0.7224**	**2.7729**	**6.0667**	**0.0173**	**1.2283**	**0.0239**	**1.2521**	**0.3285**	**0.0226**	**0.3511**		**1,748.1137**	**1,748.1137**	**0.0819**		**1,750.1621**

3.5 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4239	14.5184	12.4333	0.0189		0.8370	0.8370		0.7718	0.7718		1,872.5505	1,872.5505	0.5672		1,886.7312
Paving	0.1077					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5316**	**14.5184**	**12.4333**	**0.0189**		**0.8370**	**0.8370**		**0.7718**	**0.7718**		**1,872.5505**	**1,872.5505**	**0.5672**		**1,886.7312**

3.5 Paving - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1305	0.0897	1.1246	2.4300e-003	0.2236	1.5500e-003	0.2251	0.0593	1.4300e-003	0.0607		241.4857	241.4857	8.9000e-003		241.7082
Total	**0.1305**	**0.0897**	**1.1246**	**2.4300e-003**	**0.2236**	**1.5500e-003**	**0.2251**	**0.0593**	**1.4300e-003**	**0.0607**		**241.4857**	**241.4857**	**8.9000e-003**		**241.7082**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4239	14.5184	12.4333	0.0189		0.8370	0.8370		0.7718	0.7718	0.0000	1,872.5505	1,872.5505	0.5672		1,886.7312
Paving	0.1077					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5316**	**14.5184**	**12.4333**	**0.0189**		**0.8370**	**0.8370**		**0.7718**	**0.7718**	**0.0000**	**1,872.5505**	**1,872.5505**	**0.5672**		**1,886.7312**

3.5 Paving - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1305	0.0897	1.1246	2.4300e-003	0.2236	1.5500e-003	0.2251	0.0593	1.4300e-003	0.0607		241.4857	241.4857	8.9000e-003		241.7082
Total	**0.1305**	**0.0897**	**1.1246**	**2.4300e-003**	**0.2236**	**1.5500e-003**	**0.2251**	**0.0593**	**1.4300e-003**	**0.0607**		**241.4857**	**241.4857**	**8.9000e-003**		**241.7082**

3.6 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.6630					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
Total	**20.9616**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.1171**

3.6 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1305	0.0897	1.1246	2.4300e-003	0.2236	1.5500e-003	0.2251	0.0593	1.4300e-003	0.0607		241.4857	241.4857	8.9000e-003		241.7082
Total	**0.1305**	**0.0897**	**1.1246**	**2.4300e-003**	**0.2236**	**1.5500e-003**	**0.2251**	**0.0593**	**1.4300e-003**	**0.0607**		**241.4857**	**241.4857**	**8.9000e-003**		**241.7082**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.6630					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171
Total	**20.9616**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.1171**

3.6 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1305	0.0897	1.1246	2.4300e-003	0.2236	1.5500e-003	0.2251	0.0593	1.4300e-003	0.0607		241.4857	241.4857	8.9000e-003		241.7082
Total	**0.1305**	**0.0897**	**1.1246**	**2.4300e-003**	**0.2236**	**1.5500e-003**	**0.2251**	**0.0593**	**1.4300e-003**	**0.0607**		**241.4857**	**241.4857**	**8.9000e-003**		**241.7082**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.0187	6.2510	12.3123	0.0400	2.7569	0.0393	2.7962	0.7378	0.0371	0.7749		4,068.4986	4,068.4986	0.2173		4,073.9312
Unmitigated	1.0187	6.2510	12.3123	0.0400	2.7569	0.0393	2.7962	0.7378	0.0371	0.7749		4,068.4986	4,068.4986	0.2173		4,073.9312

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Congregate Care (Assisted Living)	378.40	303.60	336.60	1,236,130	1,236,130
Enclosed Parking with Elevator	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	378.40	303.60	336.60	1,236,130	1,236,130

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Congregate Care (Assisted	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.541740	0.038987	0.178620	0.126833	0.019742	0.005671	0.017070	0.060066	0.001326	0.001715	0.006244	0.000823	0.001163
Other Asphalt Surfaces	0.541740	0.038987	0.178620	0.126833	0.019742	0.005671	0.017070	0.060066	0.001326	0.001715	0.006244	0.000823	0.001163
Congregate Care (Assisted Living)	0.541740	0.038987	0.178620	0.126833	0.019742	0.005671	0.017070	0.060066	0.001326	0.001715	0.006244	0.000823	0.001163

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0607	0.5187	0.2207	3.3100e-003		0.0419	0.0419		0.0419	0.0419		662.1837	662.1837	0.0127	0.0121	666.1187
NaturalGas Unmitigated	0.0607	0.5187	0.2207	3.3100e-003		0.0419	0.0419		0.0419	0.0419		662.1837	662.1837	0.0127	0.0121	666.1187

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Congregate Care (Assisted Living)	5628.56	0.0607	0.5187	0.2207	3.3100e-003		0.0419	0.0419		0.0419	0.0419		662.1837	662.1837	0.0127	0.0121	666.1187
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0607**	**0.5187**	**0.2207**	**3.3100e-003**		**0.0419**	**0.0419**		**0.0419**	**0.0419**		**662.1837**	**662.1837**	**0.0127**	**0.0121**	**666.1187**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Congregate Care (Assisted Living)	5.62856	0.0607	0.5187	0.2207	3.3100e-003		0.0419	0.0419		0.0419	0.0419		662.1837	662.1837	0.0127	0.0121	666.1187
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0607**	**0.5187**	**0.2207**	**3.3100e-003**		**0.0419**	**0.0419**		**0.0419**	**0.0419**		**662.1837**	**662.1837**	**0.0127**	**0.0121**	**666.1187**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.5457	0.2052	9.1696	1.1200e-003		0.0580	0.0580		0.0580	0.0580	0.0000	143.4147	143.4147	0.0185	2.3300e-003	144.5718
Unmitigated	1.5457	0.2052	9.1696	1.1200e-003		0.0580	0.0580		0.0580	0.0580	0.0000	143.4147	143.4147	0.0185	2.3300e-003	144.5718

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1019					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1523					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0117	0.0995	0.0424	6.4000e-004		8.0500e-003	8.0500e-003		8.0500e-003	8.0500e-003	0.0000	127.0588	127.0588	2.4400e-003	2.3300e-003	127.8139
Landscaping	0.2799	0.1057	9.1272	4.8000e-004		0.0500	0.0500		0.0500	0.0500		16.3559	16.3559	0.0161		16.7579
Total	**1.5457**	**0.2052**	**9.1696**	**1.1200e-003**		**0.0581**	**0.0581**		**0.0581**	**0.0581**	**0.0000**	**143.4147**	**143.4147**	**0.0185**	**2.3300e-003**	**144.5718**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1019					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1523					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0117	0.0995	0.0424	6.4000e-004		8.0500e-003	8.0500e-003		8.0500e-003	8.0500e-003	0.0000	127.0588	127.0588	2.4400e-003	2.3300e-003	127.8139
Landscaping	0.2799	0.1057	9.1272	4.8000e-004		0.0500	0.0500		0.0500	0.0500		16.3559	16.3559	0.0161		16.7579
Total	**1.5457**	**0.2052**	**9.1696**	**1.1200e-003**		**0.0581**	**0.0581**		**0.0581**	**0.0581**	**0.0000**	**143.4147**	**143.4147**	**0.0185**	**2.3300e-003**	**144.5718**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Summerland Senior Living Project With Mitigation

San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	37.00	Space	0.00	14,800.00	0
Other Asphalt Surfaces	32.10	1000sqft	0.74	32,100.00	0
Congregate Care (Assisted Living)	110.00	Dwelling Unit	2.42	57,356.00	315

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Summerland Senior Living Project With Mitigation - San Bernardino-South Coast County, Winter

Project Characteristics -

Land Use - Per Site Plan.

Construction Phase - Site Preparation and Grading to extend over a period of ten (10) days.

Grading -

Woodstoves - No fireplaces will be placed in the dwelling units, but six natural gas fire places will be placed in the common areas.

Construction Off-road Equipment Mitigation - Project will be required to comply with SCAQMD Rule 403 regrading fugitive dust control.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Vehicle Trips - Trips rates have been adjusted to reflect trip generation based off the traffic study which utilizes occupied beds as size metric.

Water And Wastewater -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	25
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	8.00	10.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	PhaseEndDate	6/26/2018	7/5/2018
tblConstructionPhase	PhaseEndDate	5/7/2018	5/16/2018
tblConstructionPhase	PhaseEndDate	6/19/2017	6/28/2017
tblConstructionPhase	PhaseEndDate	5/31/2018	6/11/2018
tblConstructionPhase	PhaseEndDate	6/7/2017	6/14/2017
tblConstructionPhase	PhaseStartDate	6/1/2018	6/12/2018
tblConstructionPhase	PhaseStartDate	6/20/2017	6/29/2017
tblConstructionPhase	PhaseStartDate	6/8/2017	6/15/2017

tblConstructionPhase	PhaseStartDate	5/8/2018	5/17/2018
tblFireplaces	NumberGas	93.50	6.00
tblFireplaces	NumberNoFireplace	11.00	104.00
tblFireplaces	NumberWood	5.50	0.00
tblGrading	MaterialExported	0.00	8,000.00
tblGrading	MaterialExported	0.00	8,000.00
tblGrading	MaterialImported	0.00	2,000.00
tblGrading	MaterialImported	0.00	2,000.00
tblLandUse	BuildingSpaceSquareFeet	110,000.00	57,356.00
tblLandUse	LandUseSquareFeet	110,000.00	57,356.00
tblLandUse	LotAcreage	0.33	0.00
tblLandUse	LotAcreage	6.88	2.42
tblProjectCharacteristics	OperationalYear	2018	2019
tblVehicleTrips	ST_TR	2.20	2.76
tblVehicleTrips	SU_TR	2.44	3.06
tblVehicleTrips	WD_TR	2.74	3.44
tblWoodstoves	NumberCatalytic	5.50	0.00
tblWoodstoves	NumberNoncatalytic	5.50	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	5.9446	83.1748	29.4674	0.1189	20.1308	3.0336	23.1644	10.4811	2.7965	13.2776	0.0000	12,454.3177	12,454.3177	1.7228	0.0000	12,497.3867
2018	21.0917	26.1767	22.7427	0.0427	1.2283	1.5239	2.7522	0.3285	1.4327	1.7612	0.0000	4,225.0079	4,225.0079	0.7226	0.0000	4,243.0717
Maximum	**21.0917**	**83.1748**	**29.4674**	**0.1189**	**20.1308**	**3.0336**	**23.1644**	**10.4811**	**2.7965**	**13.2776**	**0.0000**	**12,454.3177**	**12,454.3177**	**1.7228**	**0.0000**	**12,497.3867**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	5.9446	83.1748	29.4674	0.1189	7.9779	3.0336	11.0115	3.8310	2.7965	6.6275	0.0000	12,454.3177	12,454.3177	1.7228	0.0000	12,497.3867
2018	21.0917	26.1767	22.7427	0.0427	1.2283	1.5239	2.7522	0.3285	1.4327	1.7612	0.0000	4,225.0079	4,225.0079	0.7226	0.0000	4,243.0717
Maximum	**21.0917**	**83.1748**	**29.4674**	**0.1189**	**7.9779**	**3.0336**	**11.0115**	**3.8310**	**2.7965**	**6.6275**	**0.0000**	**12,454.3177**	**12,454.3177**	**1.7228**	**0.0000**	**12,497.3867**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**56.90**	**0.00**	**46.89**	**61.52**	**0.00**	**44.22**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.5457	0.2052	9.1696	1.1200e-003		0.0580	0.0580		0.0580	0.0580	0.0000	143.4147	143.4147	0.0185	2.3300e-003	144.5718
Energy	0.0607	0.5187	0.2207	3.3100e-003		0.0419	0.0419		0.0419	0.0419		662.1837	662.1837	0.0127	0.0121	666.1187
Mobile	0.8941	6.2988	10.7973	0.0368	2.7569	0.0397	2.7965	0.7378	0.0374	0.7753		3,749.3078	3,749.3078	0.2182		3,754.7621
Total	**2.5004**	**7.0228**	**20.1876**	**0.0412**	**2.7569**	**0.1396**	**2.8965**	**0.7378**	**0.1374**	**0.8752**	**0.0000**	**4,554.9062**	**4,554.9062**	**0.2494**	**0.0145**	**4,565.4526**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.5457	0.2052	9.1696	1.1200e-003		0.0580	0.0580		0.0580	0.0580	0.0000	143.4147	143.4147	0.0185	2.3300e-003	144.5718
Energy	0.0607	0.5187	0.2207	3.3100e-003		0.0419	0.0419		0.0419	0.0419		662.1837	662.1837	0.0127	0.0121	666.1187
Mobile	0.8941	6.2988	10.7973	0.0368	2.7569	0.0397	2.7965	0.7378	0.0374	0.7753		3,749.3078	3,749.3078	0.2182		3,754.7621
Total	**2.5004**	**7.0228**	**20.1876**	**0.0412**	**2.7569**	**0.1396**	**2.8965**	**0.7378**	**0.1374**	**0.8752**	**0.0000**	**4,554.9062**	**4,554.9062**	**0.2494**	**0.0145**	**4,565.4526**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2017	6/14/2017	5	10	
2	Grading	Grading	6/15/2017	6/28/2017	5	10	
3	Building Construction	Building Construction	6/29/2017	5/16/2018	5	230	
4	Paving	Paving	5/17/2018	6/11/2018	5	18	
5	Architectural Coating	Architectural Coating	6/12/2018	7/5/2018	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 5

Acres of Paving: 0.74

Residential Indoor: 116,146; Residential Outdoor: 38,715; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 2,814 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading	Excavators	1	8.00	158	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	6.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	99.00	19.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	1,000.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	1,000.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.1794	0.0000	18.1794	9.9478	0.0000	9.9478			0.0000			0.0000
Off-Road	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483		3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**18.1794**	**2.8786**	**21.0579**	**9.9478**	**2.6483**	**12.5961**		**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

3.2 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.8527	30.8016	5.0550	0.0789	1.7503	0.1535	1.9038	0.4799	0.1469	0.6268		8,358.7770	8,358.7770	0.5213		8,371.8095
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
Worker	0.1311	0.0979	0.9570	2.0200e-003	0.2012	1.4500e-003	0.2027	0.0534	1.3400e-003	0.0547		200.5907	200.5907	8.0500e-003		200.7920
Total	**0.9838**	**30.8994**	**6.0120**	**0.0809**	**1.9515**	**0.1550**	**2.1065**	**0.5333**	**0.1482**	**0.6815**		**8,559.3677**	**8,559.3677**	**0.5294**		**8,572.6015**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0265	0.0000	6.0265	3.2977	0.0000	3.2977			0.0000			0.0000
Off-Road	4.9608	52.2754	23.4554	0.0380		2.8786	2.8786		2.6483	2.6483	0.0000	3,894.9500	3,894.9500	1.1934		3,924.7852
Total	**4.9608**	**52.2754**	**23.4554**	**0.0380**	**6.0265**	**2.8786**	**8.9050**	**3.2977**	**2.6483**	**5.9460**	**0.0000**	**3,894.9500**	**3,894.9500**	**1.1934**		**3,924.7852**

3.2 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.8527	30.8016	5.0550	0.0789	1.7503	0.1535	1.9038	0.4799	0.1469	0.6268		8,358.7770	8,358.7770	0.5213		8,371.8095
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
Worker	0.1311	0.0979	0.9570	2.0200e-003	0.2012	1.4500e-003	0.2027	0.0534	1.3400e-003	0.0547		200.5907	200.5907	8.0500e-003		200.7920
Total	**0.9838**	**30.8994**	**6.0120**	**0.0809**	**1.9515**	**0.1550**	**2.1065**	**0.5333**	**0.1482**	**0.6815**		**8,559.3677**	**8,559.3677**	**0.5294**		**8,572.6015**

3.3 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.6654	0.0000	6.6654	3.3846	0.0000	3.3846			0.0000			0.0000
Off-Road	3.0705	33.8868	17.1042	0.0297		1.7774	1.7774		1.6352	1.6352		3,037.9107	3,037.9107	0.9308		3,061.1809
Total	**3.0705**	**33.8868**	**17.1042**	**0.0297**	**6.6654**	**1.7774**	**8.4429**	**3.3846**	**1.6352**	**5.0199**		**3,037.9107**	**3,037.9107**	**0.9308**		**3,061.1809**

3.3 Grading - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.8527	30.8016	5.0550	0.0789	1.7503	0.1535	1.9038	0.4799	0.1469	0.6268		8,358.7770	8,358.7770	0.5213		8,371.8095
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
Worker	0.1093	0.0815	0.7975	1.6800e-003	0.1677	1.2100e-003	0.1689	0.0445	1.1200e-003	0.0456		167.1589	167.1589	6.7100e-003		167.3267
Total	**0.9620**	**30.8831**	**5.8525**	**0.0806**	**1.9179**	**0.1548**	**2.0727**	**0.5244**	**0.1480**	**0.6724**		**8,525.9359**	**8,525.9359**	**0.5280**		**8,539.1362**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2096	0.0000	2.2096	1.1220	0.0000	1.1220			0.0000			0.0000
Off-Road	3.0705	33.8868	17.1042	0.0297		1.7774	1.7774		1.6352	1.6352	0.0000	3,037.9107	3,037.9107	0.9308		3,061.1809
Total	**3.0705**	**33.8868**	**17.1042**	**0.0297**	**2.2096**	**1.7774**	**3.9870**	**1.1220**	**1.6352**	**2.7572**	**0.0000**	**3,037.9107**	**3,037.9107**	**0.9308**		**3,061.1809**

3.3 Grading - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.8527	30.8016	5.0550	0.0789	1.7503	0.1535	1.9038	0.4799	0.1469	0.6268		8,358.7770	8,358.7770	0.5213		8,371.8095
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
Worker	0.1093	0.0815	0.7975	1.6800e-003	0.1677	1.2100e-003	0.1689	0.0445	1.1200e-003	0.0456		167.1589	167.1589	6.7100e-003		167.3267
Total	**0.9620**	**30.8831**	**5.8525**	**0.0806**	**1.9179**	**0.1548**	**2.0727**	**0.5244**	**0.1480**	**0.6724**		**8,525.9359**	**8,525.9359**	**0.5280**		**8,539.1362**

3.4 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1149	26.5546	18.1825	0.0269		1.7879	1.7879		1.6791	1.6791		2,650.9797	2,650.9797	0.6531		2,667.3078
Total	**3.1149**	**26.5546**	**18.1825**	**0.0269**		**1.7879**	**1.7879**		**1.6791**	**1.6791**		**2,650.9797**	**2,650.9797**	**0.6531**		**2,667.3078**

3.4 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0916	2.4755	0.6428	5.0600e-003	0.1217	0.0208	0.1425	0.0350	0.0199	0.0549		532.8926	532.8926	0.0436		533.9822
Worker	0.7211	0.5382	5.2634	0.0111	1.1066	7.9800e-003	1.1146	0.2935	7.3600e-003	0.3008		1,103.2490	1,103.2490	0.0443		1,104.3560
Total	**0.8127**	**3.0137**	**5.9062**	**0.0162**	**1.2283**	**0.0288**	**1.2571**	**0.3285**	**0.0273**	**0.3558**		**1,636.1416**	**1,636.1416**	**0.0879**		**1,638.3382**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1149	26.5546	18.1825	0.0269		1.7879	1.7879		1.6791	1.6791	0.0000	2,650.9797	2,650.9797	0.6531		2,667.3078
Total	**3.1149**	**26.5546**	**18.1825**	**0.0269**		**1.7879**	**1.7879**		**1.6791**	**1.6791**	**0.0000**	**2,650.9797**	**2,650.9797**	**0.6531**		**2,667.3078**

3.4 Building Construction - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0916	2.4755	0.6428	5.0600e-003	0.1217	0.0208	0.1425	0.0350	0.0199	0.0549		532.8926	532.8926	0.0436		533.9822
Worker	0.7211	0.5382	5.2634	0.0111	1.1066	7.9800e-003	1.1146	0.2935	7.3600e-003	0.3008		1,103.2490	1,103.2490	0.0443		1,104.3560
Total	**0.8127**	**3.0137**	**5.9062**	**0.0162**	**1.2283**	**0.0288**	**1.2571**	**0.3285**	**0.0273**	**0.3558**		**1,636.1416**	**1,636.1416**	**0.0879**		**1,638.3382**

3.4 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099		2,620.9351	2,620.9351	0.6421		2,636.9883
Total	**2.6795**	**23.3900**	**17.5804**	**0.0269**		**1.4999**	**1.4999**		**1.4099**	**1.4099**		**2,620.9351**	**2,620.9351**	**0.6421**		**2,636.9883**

3.4 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0802	2.3188	0.5691	5.0500e-003	0.1217	0.0164	0.1381	0.0350	0.0157	0.0507		531.6752	531.6752	0.0417		532.7174
Worker	0.6440	0.4679	4.5931	0.0108	1.1066	7.6900e-003	1.1143	0.2935	7.0800e-003	0.3006		1,072.3976	1,072.3976	0.0387		1,073.3660
Total	**0.7241**	**2.7867**	**5.1622**	**0.0158**	**1.2283**	**0.0241**	**1.2523**	**0.3285**	**0.0228**	**0.3513**		**1,604.0728**	**1,604.0728**	**0.0804**		**1,606.0834**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099	0.0000	2,620.9351	2,620.9351	0.6421		2,636.9883
Total	**2.6795**	**23.3900**	**17.5804**	**0.0269**		**1.4999**	**1.4999**		**1.4099**	**1.4099**	**0.0000**	**2,620.9351**	**2,620.9351**	**0.6421**		**2,636.9883**

3.4 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0802	2.3188	0.5691	5.0500e-003	0.1217	0.0164	0.1381	0.0350	0.0157	0.0507		531.6752	531.6752	0.0417		532.7174
Worker	0.6440	0.4679	4.5931	0.0108	1.1066	7.6900e-003	1.1143	0.2935	7.0800e-003	0.3006		1,072.3976	1,072.3976	0.0387		1,073.3660
Total	**0.7241**	**2.7867**	**5.1622**	**0.0158**	**1.2283**	**0.0241**	**1.2523**	**0.3285**	**0.0228**	**0.3513**		**1,604.0728**	**1,604.0728**	**0.0804**		**1,606.0834**

3.5 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4239	14.5184	12.4333	0.0189		0.8370	0.8370		0.7718	0.7718		1,872.5505	1,872.5505	0.5672		1,886.7312
Paving	0.1077					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5316**	**14.5184**	**12.4333**	**0.0189**		**0.8370**	**0.8370**		**0.7718**	**0.7718**		**1,872.5505**	**1,872.5505**	**0.5672**		**1,886.7312**

3.5 Paving - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1301	0.0945	0.9279	2.1800e-003	0.2236	1.5500e-003	0.2251	0.0593	1.4300e-003	0.0607		216.6460	216.6460	7.8300e-003		216.8416
Total	**0.1301**	**0.0945**	**0.9279**	**2.1800e-003**	**0.2236**	**1.5500e-003**	**0.2251**	**0.0593**	**1.4300e-003**	**0.0607**		**216.6460**	**216.6460**	**7.8300e-003**		**216.8416**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4239	14.5184	12.4333	0.0189		0.8370	0.8370		0.7718	0.7718	0.0000	1,872.5505	1,872.5505	0.5672		1,886.7312
Paving	0.1077					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5316**	**14.5184**	**12.4333**	**0.0189**		**0.8370**	**0.8370**		**0.7718**	**0.7718**	**0.0000**	**1,872.5505**	**1,872.5505**	**0.5672**		**1,886.7312**

3.5 Paving - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1301	0.0945	0.9279	2.1800e-003	0.2236	1.5500e-003	0.2251	0.0593	1.4300e-003	0.0607		216.6460	216.6460	7.8300e-003		216.8416
Total	**0.1301**	**0.0945**	**0.9279**	**2.1800e-003**	**0.2236**	**1.5500e-003**	**0.2251**	**0.0593**	**1.4300e-003**	**0.0607**		**216.6460**	**216.6460**	**7.8300e-003**		**216.8416**

3.6 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.6630					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
Total	**20.9616**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.1171**

3.6 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1301	0.0945	0.9279	2.1800e-003	0.2236	1.5500e-003	0.2251	0.0593	1.4300e-003	0.0607		216.6460	216.6460	7.8300e-003		216.8416
Total	**0.1301**	**0.0945**	**0.9279**	**2.1800e-003**	**0.2236**	**1.5500e-003**	**0.2251**	**0.0593**	**1.4300e-003**	**0.0607**		**216.6460**	**216.6460**	**7.8300e-003**		**216.8416**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.6630					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171
Total	**20.9616**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.1171**

3.6 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1301	0.0945	0.9279	2.1800e-003	0.2236	1.5500e-003	0.2251	0.0593	1.4300e-003	0.0607		216.6460	216.6460	7.8300e-003		216.8416
Total	**0.1301**	**0.0945**	**0.9279**	**2.1800e-003**	**0.2236**	**1.5500e-003**	**0.2251**	**0.0593**	**1.4300e-003**	**0.0607**		**216.6460**	**216.6460**	**7.8300e-003**		**216.8416**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.8941	6.2988	10.7973	0.0368	2.7569	0.0397	2.7965	0.7378	0.0374	0.7753		3,749.3078	3,749.3078	0.2182		3,754.7621
Unmitigated	0.8941	6.2988	10.7973	0.0368	2.7569	0.0397	2.7965	0.7378	0.0374	0.7753		3,749.3078	3,749.3078	0.2182		3,754.7621

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Congregate Care (Assisted Living)	378.40	303.60	336.60	1,236,130	1,236,130
Enclosed Parking with Elevator	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	378.40	303.60	336.60	1,236,130	1,236,130

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Congregate Care (Assisted	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.541740	0.038987	0.178620	0.126833	0.019742	0.005671	0.017070	0.060066	0.001326	0.001715	0.006244	0.000823	0.001163
Other Asphalt Surfaces	0.541740	0.038987	0.178620	0.126833	0.019742	0.005671	0.017070	0.060066	0.001326	0.001715	0.006244	0.000823	0.001163
Congregate Care (Assisted Living)	0.541740	0.038987	0.178620	0.126833	0.019742	0.005671	0.017070	0.060066	0.001326	0.001715	0.006244	0.000823	0.001163

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0607	0.5187	0.2207	3.3100e-003		0.0419	0.0419		0.0419	0.0419		662.1837	662.1837	0.0127	0.0121	666.1187
NaturalGas Unmitigated	0.0607	0.5187	0.2207	3.3100e-003		0.0419	0.0419		0.0419	0.0419		662.1837	662.1837	0.0127	0.0121	666.1187

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Congregate Care (Assisted Living)	5628.56	0.0607	0.5187	0.2207	3.3100e-003		0.0419	0.0419		0.0419	0.0419		662.1837	662.1837	0.0127	0.0121	666.1187
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0607**	**0.5187**	**0.2207**	**3.3100e-003**		**0.0419**	**0.0419**		**0.0419**	**0.0419**		**662.1837**	**662.1837**	**0.0127**	**0.0121**	**666.1187**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Congregate Care (Assisted Living)	5.62856	0.0607	0.5187	0.2207	3.3100e-003		0.0419	0.0419		0.0419	0.0419		662.1837	662.1837	0.0127	0.0121	666.1187
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0607**	**0.5187**	**0.2207**	**3.3100e-003**		**0.0419**	**0.0419**		**0.0419**	**0.0419**		**662.1837**	**662.1837**	**0.0127**	**0.0121**	**666.1187**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.5457	0.2052	9.1696	1.1200e-003		0.0580	0.0580		0.0580	0.0580	0.0000	143.4147	143.4147	0.0185	2.3300e-003	144.5718
Unmitigated	1.5457	0.2052	9.1696	1.1200e-003		0.0580	0.0580		0.0580	0.0580	0.0000	143.4147	143.4147	0.0185	2.3300e-003	144.5718

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1019					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1523					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0117	0.0995	0.0424	6.4000e-004		8.0500e-003	8.0500e-003		8.0500e-003	8.0500e-003	0.0000	127.0588	127.0588	2.4400e-003	2.3300e-003	127.8139
Landscaping	0.2799	0.1057	9.1272	4.8000e-004		0.0500	0.0500		0.0500	0.0500		16.3559	16.3559	0.0161		16.7579
Total	**1.5457**	**0.2052**	**9.1696**	**1.1200e-003**		**0.0581**	**0.0581**		**0.0581**	**0.0581**	**0.0000**	**143.4147**	**143.4147**	**0.0185**	**2.3300e-003**	**144.5718**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1019					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1523					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0117	0.0995	0.0424	6.4000e-004		8.0500e-003	8.0500e-003		8.0500e-003	8.0500e-003	0.0000	127.0588	127.0588	2.4400e-003	2.3300e-003	127.8139
Landscaping	0.2799	0.1057	9.1272	4.8000e-004		0.0500	0.0500		0.0500	0.0500		16.3559	16.3559	0.0161		16.7579
Total	**1.5457**	**0.2052**	**9.1696**	**1.1200e-003**		**0.0581**	**0.0581**		**0.0581**	**0.0581**	**0.0000**	**143.4147**	**143.4147**	**0.0185**	**2.3300e-003**	**144.5718**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Summerland Senior Living Project With Mitigation

San Bernardino-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	37.00	Space	0.00	14,800.00	0
Other Asphalt Surfaces	32.10	1000sqft	0.74	32,100.00	0
Congregate Care (Assisted Living)	110.00	Dwelling Unit	2.42	57,356.00	315

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per Site Plan.

Construction Phase - Site Preparation and Grading to extend over a period of ten (10) days.

Grading -

Woodstoves - No fireplaces will be placed in the dwelling units, but six natural gas fire places will be placed in the common areas.

Construction Off-road Equipment Mitigation - Project will be required to comply with SCAQMD Rule 403 regrading fugitive dust control.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Vehicle Trips - Trips rates have been adjusted to reflect trip generation based off the traffic study which utilizes occupied beds as size metric.

Water And Wastewater -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	25
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	8.00	10.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	PhaseEndDate	6/26/2018	7/5/2018
tblConstructionPhase	PhaseEndDate	5/7/2018	5/16/2018
tblConstructionPhase	PhaseEndDate	6/19/2017	6/28/2017
tblConstructionPhase	PhaseEndDate	5/31/2018	6/11/2018
tblConstructionPhase	PhaseEndDate	6/7/2017	6/14/2017
tblConstructionPhase	PhaseStartDate	6/1/2018	6/12/2018
tblConstructionPhase	PhaseStartDate	6/20/2017	6/29/2017
tblConstructionPhase	PhaseStartDate	6/8/2017	6/15/2017

tblConstructionPhase	PhaseStartDate	5/8/2018	5/17/2018
tblFireplaces	NumberGas	93.50	6.00
tblFireplaces	NumberNoFireplace	11.00	104.00
tblFireplaces	NumberWood	5.50	0.00
tblGrading	MaterialExported	0.00	8,000.00
tblGrading	MaterialExported	0.00	8,000.00
tblGrading	MaterialImported	0.00	2,000.00
tblGrading	MaterialImported	0.00	2,000.00
tblLandUse	BuildingSpaceSquareFeet	110,000.00	57,356.00
tblLandUse	LandUseSquareFeet	110,000.00	57,356.00
tblLandUse	LotAcreage	0.33	0.00
tblLandUse	LotAcreage	6.88	2.42
tblProjectCharacteristics	OperationalYear	2018	2019
tblVehicleTrips	ST_TR	2.20	2.76
tblVehicleTrips	SU_TR	2.44	3.06
tblVehicleTrips	WD_TR	2.74	3.44
tblWoodstoves	NumberCatalytic	5.50	0.00
tblWoodstoves	NumberNoncatalytic	5.50	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.3044	2.7026	1.8645	4.0200e-003	0.2228	0.1447	0.3675	0.0932	0.1355	0.2287	0.0000	368.9446	368.9446	0.0586	0.0000	370.4088
2018	0.3683	1.4367	1.2702	2.3500e-003	0.0630	0.0836	0.1466	0.0169	0.0785	0.0954	0.0000	210.6004	210.6004	0.0371	0.0000	211.5269
Maximum	**0.3683**	**2.7026**	**1.8645**	**4.0200e-003**	**0.2228**	**0.1447**	**0.3675**	**0.0932**	**0.1355**	**0.2287**	**0.0000**	**368.9446**	**368.9446**	**0.0586**	**0.0000**	**370.4088**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.3044	2.7026	1.8645	4.0200e-003	0.1398	0.1447	0.2845	0.0486	0.1355	0.1841	0.0000	368.9444	368.9444	0.0586	0.0000	370.4086
2018	0.3683	1.4367	1.2702	2.3500e-003	0.0630	0.0836	0.1466	0.0169	0.0785	0.0954	0.0000	210.6003	210.6003	0.0371	0.0000	211.5267
Maximum	**0.3683**	**2.7026**	**1.8645**	**4.0200e-003**	**0.1398**	**0.1447**	**0.2845**	**0.0486**	**0.1355**	**0.1841**	**0.0000**	**368.9444**	**368.9444**	**0.0586**	**0.0000**	**370.4086**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**29.06**	**0.00**	**16.15**	**40.49**	**0.00**	**13.75**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-1-2017	8-31-2017	1.5515	1.5515
2	9-1-2017	11-30-2017	1.0884	1.0884
3	12-1-2017	2-28-2018	0.9941	0.9941
4	3-1-2018	5-31-2018	0.9004	0.9004
5	6-1-2018	8-31-2018	0.2627	0.2627
		Highest	1.5515	1.5515

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	0.2640	0.0145	1.1414	7.0000e-005		6.3500e-003	6.3500e-003		6.3500e-003	6.3500e-003	0.0000	3.2956	3.2956	1.8500e-003	3.0000e-005	3.3497
Energy	0.0111	0.0947	0.0403	6.0000e-004		7.6500e-003	7.6500e-003		7.6500e-003	7.6500e-003	0.0000	314.1712	314.1712	0.0106	3.7600e-003	315.5545
Mobile	0.1521	1.1221	1.9433	6.5400e-003	0.4707	6.8500e-003	0.4776	0.1262	6.4700e-003	0.1326	0.0000	603.7370	603.7370	0.0340	0.0000	604.5858
Waste						0.0000	0.0000		0.0000	0.0000	20.3762	0.0000	20.3762	1.2042	0.0000	50.4813
Water						0.0000	0.0000		0.0000	0.0000	2.2737	45.7282	48.0020	0.2354	5.9000e-003	55.6472
Total	**0.4272**	**1.2312**	**3.1250**	**7.2100e-003**	**0.4707**	**0.0209**	**0.4916**	**0.1262**	**0.0205**	**0.1466**	**22.6500**	**966.9319**	**989.5819**	**1.4860**	**9.6900e-003**	**1,029.6184**

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	0.2640	0.0145	1.1414	7.0000e-005		6.3500e-003	6.3500e-003		6.3500e-003	6.3500e-003	0.0000	3.2956	3.2956	1.8500e-003	3.0000e-005	3.3497
Energy	0.0111	0.0947	0.0403	6.0000e-004		7.6500e-003	7.6500e-003		7.6500e-003	7.6500e-003	0.0000	314.1712	314.1712	0.0106	3.7600e-003	315.5545
Mobile	0.1521	1.1221	1.9433	6.5400e-003	0.4707	6.8500e-003	0.4776	0.1262	6.4700e-003	0.1326	0.0000	603.7370	603.7370	0.0340	0.0000	604.5858
Waste						0.0000	0.0000		0.0000	0.0000	20.3762	0.0000	20.3762	1.2042	0.0000	50.4813
Water						0.0000	0.0000		0.0000	0.0000	2.2737	45.7282	48.0020	0.2354	5.9000e-003	55.6472
Total	**0.4272**	**1.2312**	**3.1250**	**7.2100e-003**	**0.4707**	**0.0209**	**0.4916**	**0.1262**	**0.0205**	**0.1466**	**22.6500**	**966.9319**	**989.5819**	**1.4860**	**9.6900e-003**	**1,029.6184**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Summerland Senior Living Project With Mitigation - San Bernardino-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2017	6/14/2017	5	10	
2	Grading	Grading	6/15/2017	6/28/2017	5	10	
3	Building Construction	Building Construction	6/29/2017	5/16/2018	5	230	
4	Paving	Paving	5/17/2018	6/11/2018	5	18	
5	Architectural Coating	Architectural Coating	6/12/2018	7/5/2018	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 5

Acres of Paving: 0.74

Residential Indoor: 116,146; Residential Outdoor: 38,715; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 2,814 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading	Excavators	1	8.00	158	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	6.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	99.00	19.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	1,000.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	1,000.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2017

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					0.0909	0.0000	0.0909	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0248	0.2614	0.1173	1.9000e-004		0.0144	0.0144		0.0132	0.0132	0.0000	17.6672	17.6672	5.4100e-003	0.0000	17.8025
Total	**0.0248**	**0.2614**	**0.1173**	**1.9000e-004**	**0.0909**	**0.0144**	**0.1053**	**0.0497**	**0.0132**	**0.0630**	**0.0000**	**17.6672**	**17.6672**	**5.4100e-003**	**0.0000**	**17.8025**

3.2 Site Preparation - 2017

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	4.1700e-003	0.1571	0.0236	4.0000e-004	8.6100e-003	7.6000e-004	9.3700e-003	2.3600e-003	7.3000e-004	3.0900e-003	0.0000	38.4727	38.4727	2.2700e-003	0.0000	38.5294
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	6.0000e-004	5.2000e-004	5.0300e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9298	0.9298	4.0000e-005	0.0000	0.9307
Total	**4.7700e-003**	**0.1576**	**0.0286**	**4.1000e-004**	**9.6000e-003**	**7.7000e-004**	**0.0104**	**2.6200e-003**	**7.4000e-004**	**3.3600e-003**	**0.0000**	**39.4024**	**39.4024**	**2.3100e-003**	**0.0000**	**39.4601**

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					0.0301	0.0000	0.0301	0.0165	0.0000	0.0165	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0248	0.2614	0.1173	1.9000e-004		0.0144	0.0144		0.0132	0.0132	0.0000	17.6672	17.6672	5.4100e-003	0.0000	17.8025
Total	**0.0248**	**0.2614**	**0.1173**	**1.9000e-004**	**0.0301**	**0.0144**	**0.0445**	**0.0165**	**0.0132**	**0.0297**	**0.0000**	**17.6672**	**17.6672**	**5.4100e-003**	**0.0000**	**17.8025**

3.2 Site Preparation - 2017

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	4.1700e-003	0.1571	0.0236	4.0000e-004	8.6100e-003	7.6000e-004	9.3700e-003	2.3600e-003	7.3000e-004	3.0900e-003	0.0000	38.4727	38.4727	2.2700e-003	0.0000	38.5294
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	6.0000e-004	5.2000e-004	5.0300e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9298	0.9298	4.0000e-005	0.0000	0.9307
Total	**4.7700e-003**	**0.1576**	**0.0286**	**4.1000e-004**	**9.6000e-003**	**7.7000e-004**	**0.0104**	**2.6200e-003**	**7.4000e-004**	**3.3600e-003**	**0.0000**	**39.4024**	**39.4024**	**2.3100e-003**	**0.0000**	**39.4601**

3.3 Grading - 2017

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					0.0333	0.0000	0.0333	0.0169	0.0000	0.0169	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0154	0.1694	0.0855	1.5000e-004		8.8900e-003	8.8900e-003		8.1800e-003	8.1800e-003	0.0000	13.7797	13.7797	4.2200e-003	0.0000	13.8853
Total	**0.0154**	**0.1694**	**0.0855**	**1.5000e-004**	**0.0333**	**8.8900e-003**	**0.0422**	**0.0169**	**8.1800e-003**	**0.0251**	**0.0000**	**13.7797**	**13.7797**	**4.2200e-003**	**0.0000**	**13.8853**

3.3 Grading - 2017

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	4.1700e-003	0.1571	0.0236	4.0000e-004	8.6100e-003	7.6000e-004	9.3700e-003	2.3600e-003	7.3000e-004	3.0900e-003	0.0000	38.4727	38.4727	2.2700e-003	0.0000	38.5294
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-004	4.3000e-004	4.1900e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7748	0.7748	3.0000e-005	0.0000	0.7756
Total	**4.6700e-003**	**0.1575**	**0.0278**	**4.1000e-004**	**9.4300e-003**	**7.7000e-004**	**0.0102**	**2.5800e-003**	**7.4000e-004**	**3.3100e-003**	**0.0000**	**39.2475**	**39.2475**	**2.3000e-003**	**0.0000**	**39.3050**

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					0.0111	0.0000	0.0111	5.6100e-003	0.0000	5.6100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0154	0.1694	0.0855	1.5000e-004		8.8900e-003	8.8900e-003		8.1800e-003	8.1800e-003	0.0000	13.7797	13.7797	4.2200e-003	0.0000	13.8853
Total	**0.0154**	**0.1694**	**0.0855**	**1.5000e-004**	**0.0111**	**8.8900e-003**	**0.0199**	**5.6100e-003**	**8.1800e-003**	**0.0138**	**0.0000**	**13.7797**	**13.7797**	**4.2200e-003**	**0.0000**	**13.8853**

3.3 Grading - 2017

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	4.1700e-003	0.1571	0.0236	4.0000e-004	8.6100e-003	7.6000e-004	9.3700e-003	2.3600e-003	7.3000e-004	3.0900e-003	0.0000	38.4727	38.4727	2.2700e-003	0.0000	38.5294
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-004	4.3000e-004	4.1900e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7748	0.7748	3.0000e-005	0.0000	0.7756
Total	**4.6700e-003**	**0.1575**	**0.0278**	**4.1000e-004**	**9.4300e-003**	**7.7000e-004**	**0.0102**	**2.5800e-003**	**7.4000e-004**	**3.3100e-003**	**0.0000**	**39.2475**	**39.2475**	**2.3000e-003**	**0.0000**	**39.3050**

3.4 Building Construction - 2017

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	0.2056	1.7526	1.2000	1.7800e-003		0.1180	0.1180		0.1108	0.1108	0.0000	158.7253	158.7253	0.0391	0.0000	159.7029
Total	**0.2056**	**1.7526**	**1.2000**	**1.7800e-003**		**0.1180**	**0.1180**		**0.1108**	**0.1108**	**0.0000**	**158.7253**	**158.7253**	**0.0391**	**0.0000**	**159.7029**

3.4 Building Construction - 2017

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	5.8900e-003	0.1667	0.0403	3.4000e-004	7.9100e-003	1.3600e-003	9.2700e-003	2.2800e-003	1.3000e-003	3.5900e-003	0.0000	32.6219	32.6219	2.4900e-003	0.0000	32.6842
Worker	0.0433	0.0374	0.3650	7.5000e-004	0.0716	5.3000e-004	0.0722	0.0190	4.9000e-004	0.0195	0.0000	67.5006	67.5006	2.7300e-003	0.0000	67.5688
Total	**0.0492**	**0.2041**	**0.4053**	**1.0900e-003**	**0.0796**	**1.8900e-003**	**0.0814**	**0.0213**	**1.7900e-003**	**0.0231**	**0.0000**	**100.1225**	**100.1225**	**5.2200e-003**	**0.0000**	**100.2530**

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	0.2056	1.7526	1.2000	1.7800e-003		0.1180	0.1180		0.1108	0.1108	0.0000	158.7251	158.7251	0.0391	0.0000	159.7027
Total	**0.2056**	**1.7526**	**1.2000**	**1.7800e-003**		**0.1180**	**0.1180**		**0.1108**	**0.1108**	**0.0000**	**158.7251**	**158.7251**	**0.0391**	**0.0000**	**159.7027**

3.4 Building Construction - 2017

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	5.8900e-003	0.1667	0.0403	3.4000e-004	7.9100e-003	1.3600e-003	9.2700e-003	2.2800e-003	1.3000e-003	3.5900e-003	0.0000	32.6219	32.6219	2.4900e-003	0.0000	32.6842
Worker	0.0433	0.0374	0.3650	7.5000e-004	0.0716	5.3000e-004	0.0722	0.0190	4.9000e-004	0.0195	0.0000	67.5006	67.5006	2.7300e-003	0.0000	67.5688
Total	**0.0492**	**0.2041**	**0.4053**	**1.0900e-003**	**0.0796**	**1.8900e-003**	**0.0814**	**0.0213**	**1.7900e-003**	**0.0231**	**0.0000**	**100.1225**	**100.1225**	**5.2200e-003**	**0.0000**	**100.2530**

3.4 Building Construction - 2018

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	0.1313	1.1461	0.8614	1.3200e-003		0.0735	0.0735		0.0691	0.0691	0.0000	116.5059	116.5059	0.0285	0.0000	117.2195
Total	**0.1313**	**1.1461**	**0.8614**	**1.3200e-003**		**0.0735**	**0.0735**		**0.0691**	**0.0691**	**0.0000**	**116.5059**	**116.5059**	**0.0285**	**0.0000**	**117.2195**

3.4 Building Construction - 2018

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	3.8200e-003	0.1159	0.0263	2.5000e-004	5.8700e-003	8.0000e-004	6.6700e-003	1.6900e-003	7.6000e-004	2.4600e-003	0.0000	24.1777	24.1777	1.7600e-003	0.0000	24.2217
Worker	0.0287	0.0241	0.2363	5.4000e-004	0.0532	3.8000e-004	0.0536	0.0141	3.5000e-004	0.0145	0.0000	48.7150	48.7150	1.7700e-003	0.0000	48.7592
Total	**0.0325**	**0.1401**	**0.2626**	**7.9000e-004**	**0.0591**	**1.1800e-003**	**0.0602**	**0.0158**	**1.1100e-003**	**0.0169**	**0.0000**	**72.8926**	**72.8926**	**3.5300e-003**	**0.0000**	**72.9810**

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	0.1313	1.1461	0.8614	1.3200e-003		0.0735	0.0735		0.0691	0.0691	0.0000	116.5058	116.5058	0.0285	0.0000	117.2194
Total	**0.1313**	**1.1461**	**0.8614**	**1.3200e-003**		**0.0735**	**0.0735**		**0.0691**	**0.0691**	**0.0000**	**116.5058**	**116.5058**	**0.0285**	**0.0000**	**117.2194**

3.4 Building Construction - 2018

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	3.8200e-003	0.1159	0.0263	2.5000e-004	5.8700e-003	8.0000e-004	6.6700e-003	1.6900e-003	7.6000e-004	2.4600e-003	0.0000	24.1777	24.1777	1.7600e-003	0.0000	24.2217
Worker	0.0287	0.0241	0.2363	5.4000e-004	0.0532	3.8000e-004	0.0536	0.0141	3.5000e-004	0.0145	0.0000	48.7150	48.7150	1.7700e-003	0.0000	48.7592
Total	**0.0325**	**0.1401**	**0.2626**	**7.9000e-004**	**0.0591**	**1.1800e-003**	**0.0602**	**0.0158**	**1.1100e-003**	**0.0169**	**0.0000**	**72.8926**	**72.8926**	**3.5300e-003**	**0.0000**	**72.9810**

3.5 Paving - 2018

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	0.0128	0.1307	0.1119	1.7000e-004		7.5300e-003	7.5300e-003		6.9500e-003	6.9500e-003	0.0000	15.2887	15.2887	4.6300e-003	0.0000	15.4045
Paving	9.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0138**	**0.1307**	**0.1119**	**1.7000e-004**		**7.5300e-003**	**7.5300e-003**		**6.9500e-003**	**6.9500e-003**	**0.0000**	**15.2887**	**15.2887**	**4.6300e-003**	**0.0000**	**15.4045**

3.5 Paving - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0600e-003	9.0000e-004	8.7700e-003	2.0000e-005	1.9700e-003	1.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.8076	1.8076	7.0000e-005	0.0000	1.8093
Total	**1.0600e-003**	**9.0000e-004**	**8.7700e-003**	**2.0000e-005**	**1.9700e-003**	**1.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.8076**	**1.8076**	**7.0000e-005**	**0.0000**	**1.8093**

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	0.0128	0.1307	0.1119	1.7000e-004		7.5300e-003	7.5300e-003		6.9500e-003	6.9500e-003	0.0000	15.2887	15.2887	4.6300e-003	0.0000	15.4045
Paving	9.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0138**	**0.1307**	**0.1119**	**1.7000e-004**		**7.5300e-003**	**7.5300e-003**		**6.9500e-003**	**6.9500e-003**	**0.0000**	**15.2887**	**15.2887**	**4.6300e-003**	**0.0000**	**15.4045**

3.5 Paving - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0600e-003	9.0000e-004	8.7700e-003	2.0000e-005	1.9700e-003	1.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.8076	1.8076	7.0000e-005	0.0000	1.8093
Total	**1.0600e-003**	**9.0000e-004**	**8.7700e-003**	**2.0000e-005**	**1.9700e-003**	**1.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.8076**	**1.8076**	**7.0000e-005**	**0.0000**	**1.8093**

3.6 Architectural Coating - 2018

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	0.1860					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6900e-003	0.0181	0.0167	3.0000e-005		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003	0.0000	2.2979	2.2979	2.2000e-004	0.0000	2.3034
Total	**0.1887**	**0.0181**	**0.0167**	**3.0000e-005**		**1.3500e-003**	**1.3500e-003**		**1.3500e-003**	**1.3500e-003**	**0.0000**	**2.2979**	**2.2979**	**2.2000e-004**	**0.0000**	**2.3034**

3.6 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0600e-003	9.0000e-004	8.7700e-003	2.0000e-005	1.9700e-003	1.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.8076	1.8076	7.0000e-005	0.0000	1.8093
Total	**1.0600e-003**	**9.0000e-004**	**8.7700e-003**	**2.0000e-005**	**1.9700e-003**	**1.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.8076**	**1.8076**	**7.0000e-005**	**0.0000**	**1.8093**

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	0.1860					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6900e-003	0.0181	0.0167	3.0000e-005		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003	0.0000	2.2979	2.2979	2.2000e-004	0.0000	2.3034
Total	**0.1887**	**0.0181**	**0.0167**	**3.0000e-005**		**1.3500e-003**	**1.3500e-003**		**1.3500e-003**	**1.3500e-003**	**0.0000**	**2.2979**	**2.2979**	**2.2000e-004**	**0.0000**	**2.3034**

3.6 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0600e-003	9.0000e-004	8.7700e-003	2.0000e-005	1.9700e-003	1.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.8076	1.8076	7.0000e-005	0.0000	1.8093
Total	**1.0600e-003**	**9.0000e-004**	**8.7700e-003**	**2.0000e-005**	**1.9700e-003**	**1.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.8076**	**1.8076**	**7.0000e-005**	**0.0000**	**1.8093**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1521	1.1221	1.9433	6.5400e-003	0.4707	6.8500e-003	0.4776	0.1262	6.4700e-003	0.1326	0.0000	603.7370	603.7370	0.0340	0.0000	604.5858
Unmitigated	0.1521	1.1221	1.9433	6.5400e-003	0.4707	6.8500e-003	0.4776	0.1262	6.4700e-003	0.1326	0.0000	603.7370	603.7370	0.0340	0.0000	604.5858

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Congregate Care (Assisted Living)	378.40	303.60	336.60	1,236,130	1,236,130
Enclosed Parking with Elevator	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	378.40	303.60	336.60	1,236,130	1,236,130

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Congregate Care (Assisted	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.541740	0.038987	0.178620	0.126833	0.019742	0.005671	0.017070	0.060066	0.001326	0.001715	0.006244	0.000823	0.001163
Other Asphalt Surfaces	0.541740	0.038987	0.178620	0.126833	0.019742	0.005671	0.017070	0.060066	0.001326	0.001715	0.006244	0.000823	0.001163
Congregate Care (Assisted Living)	0.541740	0.038987	0.178620	0.126833	0.019742	0.005671	0.017070	0.060066	0.001326	0.001715	0.006244	0.000823	0.001163

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	204.5393	204.5393	8.4400e-003	1.7500e-003	205.2710
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	204.5393	204.5393	8.4400e-003	1.7500e-003	205.2710
NaturalGas Mitigated	0.0111	0.0947	0.0403	6.0000e-004		7.6500e-003	7.6500e-003		7.6500e-003	7.6500e-003	0.0000	109.6319	109.6319	2.1000e-003	2.0100e-003	110.2834
NaturalGas Unmitigated	0.0111	0.0947	0.0403	6.0000e-004		7.6500e-003	7.6500e-003		7.6500e-003	7.6500e-003	0.0000	109.6319	109.6319	2.1000e-003	2.0100e-003	110.2834

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Congregate Care (Assisted Living)	2.05442e+006	0.0111	0.0947	0.0403	6.0000e-004		7.6500e-003	7.6500e-003		7.6500e-003	7.6500e-003	0.0000	109.6319	109.6319	2.1000e-003	2.0100e-003	110.2834
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0111**	**0.0947**	**0.0403**	**6.0000e-004**		**7.6500e-003**	**7.6500e-003**		**7.6500e-003**	**7.6500e-003**	**0.0000**	**109.6319**	**109.6319**	**2.1000e-003**	**2.0100e-003**	**110.2834**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Congregate Care (Assisted Living)	2.05442e+006	0.0111	0.0947	0.0403	6.0000e-004		7.6500e-003	7.6500e-003		7.6500e-003	7.6500e-003	0.0000	109.6319	109.6319	2.1000e-003	2.0100e-003	110.2834
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0111**	**0.0947**	**0.0403**	**6.0000e-004**		**7.6500e-003**	**7.6500e-003**		**7.6500e-003**	**7.6500e-003**	**0.0000**	**109.6319**	**109.6319**	**2.1000e-003**	**2.0100e-003**	**110.2834**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Congregate Care (Assisted Living)	542199	172.7562	7.1300e-003	1.4800e-003	173.3742
Enclosed Parking with Elevator	99752	31.7831	1.3100e-003	2.7000e-004	31.8968
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**204.5393**	**8.4400e-003**	**1.7500e-003**	**205.2710**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Congregate Care (Assisted Living)	542199	172.7562	7.1300e-003	1.4800e-003	173.3742
Enclosed Parking with Elevator	99752	31.7831	1.3100e-003	2.7000e-004	31.8968
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**204.5393**	**8.4400e-003**	**1.7500e-003**	**205.2710**

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	0.2640	0.0145	1.1414	7.0000e-005		6.3500e-003	6.3500e-003		6.3500e-003	6.3500e-003	0.0000	3.2956	3.2956	1.8500e-003	3.0000e-005	3.3497
Unmitigated	0.2640	0.0145	1.1414	7.0000e-005		6.3500e-003	6.3500e-003		6.3500e-003	6.3500e-003	0.0000	3.2956	3.2956	1.8500e-003	3.0000e-005	3.3497

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	0.0186					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2103					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.5000e-004	1.2400e-003	5.3000e-004	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	1.4408	1.4408	3.0000e-005	3.0000e-005	1.4494
Landscaping	0.0350	0.0132	1.1409	6.0000e-005		6.2500e-003	6.2500e-003		6.2500e-003	6.2500e-003	0.0000	1.8547	1.8547	1.8200e-003	0.0000	1.9003
Total	**0.2640**	**0.0145**	**1.1414**	**7.0000e-005**		**6.3500e-003**	**6.3500e-003**		**6.3500e-003**	**6.3500e-003**	**0.0000**	**3.2956**	**3.2956**	**1.8500e-003**	**3.0000e-005**	**3.3497**

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	0.0186					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2103					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.5000e-004	1.2400e-003	5.3000e-004	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	1.4408	1.4408	3.0000e-005	3.0000e-005	1.4494
Landscaping	0.0350	0.0132	1.1409	6.0000e-005		6.2500e-003	6.2500e-003		6.2500e-003	6.2500e-003	0.0000	1.8547	1.8547	1.8200e-003	0.0000	1.9003
Total	**0.2640**	**0.0145**	**1.1414**	**7.0000e-005**		**6.3500e-003**	**6.3500e-003**		**6.3500e-003**	**6.3500e-003**	**0.0000**	**3.2956**	**3.2956**	**1.8500e-003**	**3.0000e-005**	**3.3497**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	48.0020	0.2354	5.9000e-003	55.6472
Unmitigated	48.0020	0.2354	5.9000e-003	55.6472

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Congregate Care (Assisted Living)	7.16694 / 4.51829	48.0020	0.2354	5.9000e-003	55.6472
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**48.0020**	**0.2354**	**5.9000e-003**	**55.6472**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Congregate Care (Assisted Living)	7.16694 / 4.51829	48.0020	0.2354	5.9000e-003	55.6472
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**48.0020**	**0.2354**	**5.9000e-003**	**55.6472**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	20.3762	1.2042	0.0000	50.4813
Unmitigated	20.3762	1.2042	0.0000	50.4813

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Congregate Care (Assisted Living)	100.38	20.3762	1.2042	0.0000	50.4813
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**20.3762**	**1.2042**	**0.0000**	**50.4813**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Congregate Care (Assisted Living)	100.38	20.3762	1.2042	0.0000	50.4813
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**20.3762**	**1.2042**	**0.0000**	**50.4813**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation