

# **AIR QUALITY& GREENHOUSE GAS EMISSIONS TECHNICAL REPORT**

**Sandpiper Villa Residential Care Facility for the Elderly  
Oceanside, California**

**Prepared For**

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## APPENDIX

Supporting Air Quality Calculations

## Summary

This report analyzes the air quality impacts from the proposed project and is prepared in a format to answer the air quality issues identified in the Initial Study Environmental Checklist Form in Appendix G of the CEQA Guidelines. This report provides an overview of the existing air quality conditions at the project site, the air quality regulatory framework, and an analysis of potential air quality impacts that would result from the proposed project. Intermittent (short-term) construction emissions that occur from activities, such as site-grading and building construction, and long-term air quality impacts related to the operation of the proposed project were evaluated. This report focuses on daily and annual emissions from the construction and operational (mobile, area, stationary, and fugitive sources) activities. This air quality analysis is consistent with the guidance described in the County of San Diego *Guidelines for Determining Significance and Report Format and Content Requirement for Air Quality (2007)*, *Recommended Approach to Addressing Climate Change in CEQA Documents (2015)* and supporting information from San Diego Air Pollution Control District and South Coast Air Quality Management District.

AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed qualitative thresholds for ozone precursors?)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Environmental Setting:

Air quality is a function of both the rate and location of pollutant emissions, under the influence of meteorological conditions and topographic features that influence pollutant movement and dispersal. Atmospheric conditions such as wind speed and direction, atmospheric stability, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants, which affect air quality.

Air quality pollutants evaluated include criteria pollutants<sup>1</sup> such as carbon monoxide (CO)<sup>2</sup>, reactive organic compounds (ROG)<sup>3</sup>, nitrogen oxides (NO<sub>x</sub>), sulfur oxides (SO<sub>x</sub>), particulate matter equal to or less than 10 micrometers (coarse particulates or PM10), and particulate matter equal to or less than 2.5 micrometers (fine particulates or PM2.5)<sup>4</sup>. Greenhouse gas (GHG) emissions are addressed in the GHG emissions section.

#### *Regional Topography, Meteorology, and Climate*

The project site is located within the San Diego Air Basin (SDAB), which covers roughly 4,200 square miles, lies in the southwest corner of California, and encompasses all of San Diego County. The topography of San Diego County is highly varied, being comprised of coastal plains and lagoons, flatlands and mesas, broad valleys, canyons, foothills, mountains, and deserts. SDAB topography drives pollutant levels as the SDAB is classified as a transport recipient. Transport pollutants are transported from the South Coast Air Basin to the north and, when the wind shifts direction, Tijuana, Mexico, to the south (SDAPCD, 2013).

The climate of the SDAB is classified as Mediterranean, but is quite diverse because of the topography. The climate is dominated by the Pacific high pressure system that results in mild, dry summers and mild, wet winters. The SDAB experiences an average of 201 days above 70 °F and nine to 13 inches of rainfall annually (mostly, November through March). El Niño and La Niña patterns have large effects on the annual rainfall received in the SDAB (SDAPCD, 2013).

#### *Existing Air Quality Conditions*

The San Diego Air Pollution Control District (SDAPCD) is the agency responsible for enforcing air quality regulations in the SDAB. The SDAB is designated as a state standard nonattainment area for PM10, PM2.5, 1-hour and 8-hour ozone, and a federal standard nonattainment area for 8-hour ozone. The SDAPCD operates a regional monitoring network for ambient concentrations of air pollutants. The SDAPCD-operated monitoring station closest to the project site is the Camp Pendleton monitoring station, which is approximately 2.2 miles northwest of the project site. Measurements at the Camp Pendleton monitoring station show two exceedances of the 8-hour federal standard in 2015, four exceedances in 2016 and four exceedances in 2017. No other air quality standards were exceeded at the Camp Pendleton monitoring station between 2015 and 2017 (CARB, 2019).

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<sup>1</sup> Criteria air pollutants refer to those air pollutants for which the United States Environmental Protection Agency (USEPA) and California Air Resources Board (CARB) has established National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) under the Federal Clean Air Act (CAA).

<sup>2</sup> CO is a non-reactive pollutant that is a product of incomplete combustion of organic material, and is mostly associated with motor vehicle traffic, and in wintertime, with wood-burning stoves and fireplaces.

<sup>3</sup> VOC means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions and thus, a precursor of ozone formation. ROG are any reactive compounds of carbon, excluding methane, CO, CO<sub>2</sub> carbonic acid, metallic carbides or carbonates, ammonium carbonate, and other exempt compounds. The terms VOC and ROG are often used interchangeably.

<sup>4</sup> PM10 and PM2.5 consists of airborne particles that measure 10 microns or less in diameter and 2.5 microns or less in diameter, respectively. PM10 and PM2.5 represent fractions of particulate matter that can be inhaled into the air passages and the lungs, causing adverse health effects.

## **Regulatory Setting:**

### *City of Oceanside General Plan*

The Oceanside General Plan is the primary source of long-range planning and policy direction used to guide growth and preserve the quality of life within the City of Oceanside. The Environmental Resources Management Element contains one goal related to air quality: Cooperate with County, State, federal agencies in continuing programs of air quality improvement. The Element also mentions that development projects should apply dust controls necessary to protect the health and well-being of the surrounding community (City of Oceanside, 2002).

### *San Diego County Regional Air Quality Strategy (RAQS)*

The San Diego RAQS is the region's plan for improving air quality and attaining the federal and State air quality standards. The RAQS relies on information from the California Air Resources Board (CARB) and the San Diego Association of Governments (SANDAG) to project future emissions and determine appropriate emissions reduction strategies (SDAPCD, 2009).

### *Measures to Reduce Particulate Matter in San Diego County*

In 2005, the San Diego Air Pollution Control Board adopted the *Measures to Reduce Particulate Matter in San Diego County*. The report evaluates CARB lists of the most readily available, feasible and cost-effective statewide and local measures to reduce particulate matter. The evaluation demonstrated that San Diego County did not have source category-specific control measures for particulate matter emissions from fugitive dust from construction and unpaved roads (SDAPCD, 2005). In June of 2009, the SDAPCD later adopted Rule 55, the Fugitive Dust Rule. The SDAPCD's Rule 55 requires that construction activities implement specific measures to minimize fugitive dust emissions. SDAPCD's Rule 50, 51, and 52 also set standards for particulate matter, nuisance, and visible emissions.

### *SDAPCD Rule 67.0.1*

In June 2015, the San Diego Air Pollution Control Board adopted Rule 67.0.1 for architectural coatings. Rule 67.0.1 becomes effective January 1, 2016 and sets volatile organic compounds (VOC) content limits of architectural coatings.

### *Significance Criteria*

The SDAPCD has not adopted any CEQA guidelines for projects in the SDAB. The SDAPCD has established screening-level criteria for non-major stationary sources under SDAPCD Rule 20.2 (SDAPCD, 1998). Secondly, the County of San Diego Department of Planning and Development Services has published guidelines for determining significance and report format and content requirements (County of San Diego, 2007). For CEQA purposes, these screening-level criteria can be used as thresholds to demonstrate if a project's total emissions would result in a significant air quality impact. Therefore, screening-level criteria under Rule 20.2 are used to determine the significance of emissions from the proposed project. Because the SDAPCD has not established screening-level criteria under Rule 20.2 for daily ROG or PM2.5 emissions, the South Coast Air Quality Management District (SCAQMD) significance thresholds for daily ROG and PM2.5 emissions are used in this analysis (SCAQMD, 2015).

## **Impact Analysis:**

**a) Less-Than-Significant Impact.** The project site is located within the SDAB, which is governed by the SDAPCD. A consistency determination is important in local agency project review by comparing local planning projects to the RAQS in several ways. It fulfills the CEQA goal of fully informing local agency decision makers of the environmental costs of the project under consideration at a stage early enough to

ensure that air quality concerns are addressed. Only new or amended General Plan elements, Specific Plans and significantly unique projects need to go under a consistency review due to the RAQS being based on projections from local General Plans. Therefore, projects that are consistent with the local General Plan and do not create significant air quality impacts are considered consistent with the air quality-related regional plan. Because the proposed project is consistent with the goals of the City of Oceanside General Plan, and would not produce long-term significant quantities of criteria pollutants or violate ambient air quality standards, the proposed project is considered to be consistent with the RAQS and a more detailed consistency analysis is not warranted. Thus, air quality impacts related to applicable air quality plans would be less than significant.

**b) Less-than-Significant Impact.** The proposed project would include the development of a residential care facility for the elderly with up to 95 resident rooms contained in four, two-story buildings. The proposed project would also include 56 parking spaces. Demolition would be limited to removal of an existing concrete slab. Construction activities would include site preparation, grading, building construction, paving, and architectural coating. Grading for the proposed project would result in approximately 7,510 cubic yards of soil export, which was estimated to result in approximately 470 haul truck round trips (based on a default haul truck capacity of 16.0 cubic yards). Construction activities were assumed to commence in 2019 and would take approximately one year for completion.

Temporary construction emissions would result from on-site construction equipment and off-site haul truck trips and construction worker commuting trips. Maximum daily emissions that would be generated from construction activities are presented in **Table AQ-1**. The California Emissions Estimator Model (CalEEMod) Version 2016.3.2 was used to estimate the air pollutant emissions from construction equipment, hauling vehicles, and construction worker commuting vehicles. Emission calculation supporting information is included in the appendix.

**Table AQ-1: Maximum Daily Emissions from Construction (pounds per day)**

Maximum Daily	ROG	NO <sub>x</sub>	SO <sub>x</sub>	CO	PM10	PM2.5
Construction Emissions	60.1	94.0	0.2	26.8	12.6	5.8
Significance Threshold	75	250	250	550	100	55
Significant?	No	No	No	No	No	No

Source: CalEEMod Version 2016.3.2

Operational emissions would result from visitors and worker commuting vehicles, as well as area sources, electricity consumption, natural gas combustion, water usage and wastewater discharge, and solid waste disposal required for operating the proposed project. The proposed project estimated to generate 2.5 average daily trips (ADT) per unit, therefore the proposed project would generate approximately 238 ADT with 95 units. Maximum daily and annual emissions that would be generated from operational activities are presented in **Tables AQ-2 and AQ-3**. The CalEEMod Version 2016.3.2 was used to estimate the air pollutant emissions from operational activities. Emission calculation supporting information is included in the appendix.

**Table AQ-2: Maximum Daily Emissions from Operations (pounds per day)**

<b>Maximum Daily</b>	<b>ROG</b>	<b>NO<sub>x</sub></b>	<b>SO<sub>x</sub></b>	<b>CO</b>	<b>PM10</b>	<b>PM2.5</b>
Operational Emissions	3.6	2.2	<0.1	13.3	1.5	0.5
Significance Threshold	55	250	250	550	100	55
Significant?	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: CalEEMod Version 2016.3.2

**Table AQ-3: Annual Emissions from Operations (tons per year)**

<b>Annual</b>	<b>ROG</b>	<b>NO<sub>x</sub></b>	<b>SO<sub>x</sub></b>	<b>CO</b>	<b>PM10</b>	<b>PM2.5</b>
Operational Emissions	0.63	0.39	<0.01	1.67	0.27	0.08
Significance Threshold	-	40	40	100	15	-
Significant?	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: CalEEMod Version 2016.3.2

As presented in **Tables AQ-1 through AQ-3**, all air pollutant emissions would be below the significance thresholds for both construction and operation of the proposed project. Furthermore, construction of the proposed project would comply with SDAPCD's Rule 55, Fugitive Dust Control, which requires that construction activities implement specific measures to minimize fugitive dust emissions. The proposed project would also comply with SDAPCD's Rule 50 (Visible Emissions), Rule 51 (Nuisance), Rule 52 (Particulate Matter), and Rule 67.0.1 (Architectural Coatings). Therefore, air quality impacts would be less than significant.

**c) Less-than-Significant Impact.** The proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under state or federal ambient air quality standards. As shown previously, construction and operational emissions from the proposed project would be below the significance thresholds. Construction activities from the proposed project would comply with all SDAPCD Rules and construction would be temporary. Therefore, cumulative impacts would be less than significant.

**d) Less-than-Significant Impact.** Sensitive receptors are populations that are more susceptible to the effects of air pollution than the population at large, such as the very young, the elderly, and those suffering from certain illnesses or disabilities. Construction activities would be adjacent to residences to the north and west. Construction activities would entail the use of diesel equipment that would generate emissions of diesel particulate matter (DPM), which the CARB has categorized as a human carcinogen. Typically, health risks are estimated based on a chronic exposure period of 70 years. Because exhaust emissions associated with construction activities would be relatively low, short-term in nature, and move throughout the project site (limiting the potential exposure to any receptors); it is not anticipated that exposure to construction-related DPM would result in an elevated health risk. Therefore, impacts to sensitive receptors would be less than significant.

**e) Less-than-Significant Impact.** Diesel-fueled construction equipment exhaust would generate some odors. However, these emissions typically dissipate quickly and would be unlikely to affect a substantial number of people. Odor impacts could also result from siting a new sensitive receptor near an existing odor source. Examples of land uses that have the potential to generate considerable odors include, but are not limited to wastewater treatment plants; landfills; refineries; and chemical plants. Projects that would site a new receptor farther than the applicable screening distance from an existing odor source would not likely result in a significant odor impact. The odor screening distances for a sewage treatment plant,

refinery, and chemical plant are two miles.<sup>5</sup> The proposed project is not within this screening distance. Therefore, the proposed project would not generate objectionable odors nor be located in an area frequently subject to objectionable odors. Therefore, odor impacts would be less than significant.

## References

- California Air Resources Board, 2019. Aerometric Data Analysis and Management.
- City of Oceanside, 2002. General Plan, Environmental Resource Management Element.
- San Diego Air Pollution Control District, 2013. Air Quality in San Diego: 2013 Annual Report.
- San Diego Air Pollution Control District, 2005. Measures to Reduce Particulate Matter in San Diego County.
- San Diego Air Pollution Control District, 2009. Regional Air Quality Strategy Revision.
- San Diego Air Pollution Control District, 1998. Regulation II. Prohibitions, Rule 20.2. New Source Review, Non-Major Stationary Sources.
- County of San Diego, 2007. Guidelines for Determining Significance and Report Format and Content Requirements, Air Quality.
- South Coast Air Quality Management District, 2015, Air Quality Significance Thresholds.
- San Diego Air Pollution Control District, 1998. Regulation IV. Prohibitions, Rule 50. Visible Emissions.
- San Diego Air Pollution Control District, 1969. Regulation IV. Prohibitions, Rule 51. Nuisance.
- San Diego Air Pollution Control District, 1997. Regulation IV. Prohibitions, Rule 52. Particulate Matter.
- San Diego Air Pollution Control District, 2009. Regulation IV. Prohibitions, Rule 55. Fugitive Dust Control.
- San Diego Air Pollution Control District, 2015. Regulation IV. Prohibitions, Rule 67.0.1. Architectural Coatings.

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<sup>5</sup> Sacramento Metropolitan Air Quality Management District, Guide to Air Quality Assessment in Sacramento County, June 2014, <http://www.airquality.org/ceqa/cequiguideupdate/Ch7OdorScreeningDistancesFINAL.pdf>

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
<b>GREENHOUSE GAS EMISSIONS --</b> Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
f) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### **Environmental Setting:**

The accumulation of greenhouse gases (GHGs) in the atmosphere regulates the earth's temperature; however, emissions from human activities such as electricity production and motor vehicles have elevated the concentration of GHGs in the atmosphere. This accumulation of GHGs has contributed to an increase in the temperature of the earth's atmosphere and contributed to global climate change. GHGs include all of the following gases; carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons, perfluorocarbons, nitrogen trifluoroide (NF<sub>3</sub>), and sulfur hexafluoride (California Health and Safety Code section 38505(g)). Carbon dioxide is the reference gas for climate change because it has the smallest warming potential. To account for the warming potential of different GHGs, GHG emissions are quantified and reported as CO<sub>2</sub> equivalents (CO<sub>2</sub>e). The effects of GHG emission sources (i.e., individual projects) are reported in metric tons per year of CO<sub>2</sub>e. This allows for convenient comparisons between projects that have different percentages of the seven GHGs.

There is international scientific consensus that human-caused increases in GHGs have and will continue to contribute to global climate change. Potential global warming impacts in California may include, but are not limited to, loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years. Secondary effects are likely to include a global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity.

### **Regulatory Setting:**

#### *City of Oceanside General Plan*

The Oceanside General Plan is the primary source of long-range planning and policy direction used to guide growth and preserve the quality of life within the City of Oceanside. The Oceanside General Plan does not contain any goals or policies related to GHG emissions.

#### *San Diego County Recommended Approach to Addressing Climate Change in CEQA Documents*

The County of San Diego published *Recommended Approach to Addressing Climate Change in CEQA Documents (2015)* in order to provide a consistent, objective and predictable evaluation of significant GHG effects. The County recommends a 900 metric tons of CO<sub>2</sub>e per year screening level as a GHG significance threshold. The County recommends amortizing construction emissions over the operational life of the project (conservatively estimated at 20 years unless evidence is provided) and adding amortized construction emissions to operational emissions and then comparing the total to the 900 metric tons of

CO<sub>2</sub>e per year screening level. The County assumes that projects below the screening level would have a less-than-cumulatively considerable GHG emissions impact.

#### *Significance Criteria*

The City of Oceanside does not have an adopted GHG significance threshold. For CEQA purposes, the City utilizes the same GHG significance threshold utilized by the County of San Diego. As noted above, the County recommends a 900 metric tons of CO<sub>2</sub>e per year GHG significance threshold. The proposed project would have a cumulatively considerable contribution to climate change impacts if it would result in a net increase of GHG emissions, either directly or indirectly, at a level exceeding 900 metric tons of CO<sub>2</sub>e per year.

**a) Less-Than-Significant Impact.** The proposed project would result in GHG emissions from approximately one year of construction activities and long-term operational emissions after construction is completed. The California Emissions Estimator Model (CalEEMod) Version 2016.3.2 was used to quantify GHG emissions associated with construction of the proposed project, as well as long-term operations associated with landscape maintenance, energy use, water and wastewater use, solid waste, and vehicle trips. CalEEMod incorporates local energy emission factors and GHG emissions are reported as CO<sub>2</sub>e. Annual GHG emissions that would be generated from construction and operational activities are presented in **Table GHG-1**. GHG emissions from the proposed project would be below the significance threshold of 900 metric tons of CO<sub>2</sub>e per year. Therefore, the proposed project would result in a less than significant impact.

**Table GHG-1: Estimated Greenhouse Gas Emissions**

Emission Sources	GHG Emissions (Metric Tons of CO <sub>2</sub> e Per Year)
<b>Proposed Project Construction</b>	<b>420.6</b>
Proposed Project Operations	
Area	1.2
Energy	144.0
Mobile	283.1
Waste	43.6
Water	42.3
<b>Total Proposed Project Operations</b>	<b>514.2</b>
Amortized Construction Emissions (20 years)	21.0
<b>Total Proposed Project</b>	<b>535.2</b>
Significance Threshold	900
Significant?	No

Source: CalEEMod Version 2016.3.2

Note: Per San Diego County Guidance, Construction emissions are amortized over 20 years and added to operational emissions for comparison to the significance threshold.

**b) Less-Than-Significant Impact.** The City of Oceanside has not developed a Climate Action Plan (CAP) regarding the reduction of GHG emissions. If developed, the CAP will be a roadmap for how the City will energy consumption and GHG emissions to meet State GHG emissions targets (AB 32). The principal State plan and policy adopted for the purpose of reducing GHG emissions is AB 32. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020. Statewide plans and regulations such as GHG emissions standards for vehicles and the LCFS are being implemented at the statewide level, and compliance at the specific plan or project level is not addressed. The assumption is that AB 32 will be successful in reducing GHG emissions and reducing the cumulative GHG emissions statewide by 2020. The State has taken these measures, because no project individually could have a major impact (either positively or negatively) on the global concentration of GHGs. Therefore, the

proposed project would result in a significant impact if it would be in conflict with AB 32 State goals. The proposed project has been reviewed relative to the AB 32 measures and it has been determined that the proposed project would not conflict with the goals of AB 32.

As previously discussed, the proposed project's increase in GHG emissions would be below the County's significance threshold. Implementation of the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. Therefore, the proposed project would result in a less than significant impact.

## References

City of Oceanside, 2002. General Plan, Environmental Resource Management Element.

County of San Diego, 2015. Recommended Approach to Addressing Climate Change in CEQA Documents. January 21, 2015.

# **Sandpiper Villa Residential Care Project**

## **Supporting Air Quality Calculations**

CalEEMod Version 2016.3.2 Emissions Output

- Annual Emissions (33 pages)
- Summer Emissions (28 pages)
- Winter Emissions (28 pages)

## Sandpiper Villa Residential Care - San Diego County, Annual

**Sandpiper Villa Residential Care**  
**San Diego County, Annual**

**1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Congregate Care (Assisted Living)	95.00	Dwelling Unit	1.50	95,000.00	272
Parking Lot	56.00	Space	0.50	22,400.00	0

**1.2 Other Project Characteristics**

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	600	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

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

## Sandpiper Villa Residential Care - San Diego County, Annual

Project Characteristics - Energy Policy Initiatives Center, 2017

Land Use - Up to 95 rooms and 56 parking spaces

Construction Phase - \* Construction is estimated to take approximately one year

Grading - 7,510 cy of soil export

Demolition - estimate for existing concrete slabs on site

Architectural Coating - SDAPCD Rule 67.0.1 Architectural Coatings

Vehicle Trips - Transportation Impact Study, Chen Ryan, 2019

Woodstoves - No woodstoves or fireplaces

Energy Use -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblConstructionPhase	NumDays	200.00	240.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	PhaseEndDate	5/11/2020	6/9/2020
tblConstructionPhase	PhaseEndDate	4/13/2020	5/12/2020
tblConstructionPhase	PhaseEndDate	6/28/2019	6/3/2019
tblConstructionPhase	PhaseEndDate	7/8/2019	6/11/2019
tblConstructionPhase	PhaseEndDate	4/27/2020	5/26/2020
tblConstructionPhase	PhaseEndDate	7/2/2019	6/5/2019
tblConstructionPhase	PhaseStartDate	4/28/2020	5/27/2020
tblConstructionPhase	PhaseStartDate	7/9/2019	6/12/2019
tblConstructionPhase	PhaseStartDate	7/3/2019	6/6/2019

## Sandpiper Villa Residential Care - San Diego County, Annual

tblConstructionPhase	PhaseStartDate	4/14/2020	5/13/2020
tblConstructionPhase	PhaseStartDate	6/29/2019	6/4/2019
tblFireplaces	NumberGas	52.25	0.00
tblFireplaces	NumberNoFireplace	9.50	0.00
tblFireplaces	NumberWood	33.25	0.00
tblGrading	AcresOfGrading	2.00	3.00
tblGrading	MaterialExported	0.00	7,510.00
tblLandUse	LotAcreage	5.94	1.50
tblProjectCharacteristics	CO2IntensityFactor	720.49	600
tblVehicleTrips	ST_TR	2.20	2.50
tblVehicleTrips	SU_TR	2.44	2.50
tblVehicleTrips	WD_TR	2.74	2.50
tblWoodstoves	NumberCatalytic	4.75	0.00
tblWoodstoves	NumberNoncatalytic	4.75	0.00

**2.0 Emissions Summary**

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## 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						
2019	0.2238	1.7403	1.3782	3.0200e-003	0.0780	0.0844	0.1625	0.0236	0.0808	0.1044	0.0000	265.8253	265.8253	0.0407	0.0000	266.8423	
2020	0.4319	0.9808	0.8992	1.7800e-003	0.0354	0.0495	0.0848	9.5000e-003	0.0473	0.0568	0.0000	153.1876	153.1876	0.0248	0.0000	153.8066	
Maximum	0.4319	1.7403	1.3782	3.0200e-003	0.0780	0.0844	0.1625	0.0236	0.0808	0.1044	0.0000	265.8253	265.8253	0.0407	0.0000	266.8423	

## 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						
2019	0.2238	1.7403	1.3782	3.0200e-003	0.0780	0.0844	0.1625	0.0236	0.0808	0.1044	0.0000	265.8251	265.8251	0.0407	0.0000	266.8421	
2020	0.4319	0.9808	0.8992	1.7800e-003	0.0354	0.0495	0.0848	9.5000e-003	0.0473	0.0568	0.0000	153.1875	153.1875	0.0248	0.0000	153.8064	
Maximum	0.4319	1.7403	1.3782	3.0200e-003	0.0780	0.0844	0.1625	0.0236	0.0808	0.1044	0.0000	265.8251	265.8251	0.0407	0.0000	266.8421	

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-3-2019	9-2-2019	0.9412	0.9412
2	9-3-2019	12-2-2019	0.7747	0.7747
3	12-3-2019	3-2-2020	0.7319	0.7319
4	3-3-2020	6-2-2020	0.7735	0.7735
5	6-3-2020	9-2-2020	0.1544	0.1544
		Highest	0.9412	0.9412

**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	0.5435	8.1900e-003	0.7083	4.0000e-005		3.8900e-003	3.8900e-003		3.8900e-003	3.8900e-003	0.0000	1.1532	1.1532	1.1300e-003	0.0000	1.1814	
Energy	3.8100e-003	0.0325	0.0138	2.1000e-004		2.6300e-003	2.6300e-003		2.6300e-003	2.6300e-003	0.0000	143.3407	143.3407	5.8300e-003	1.7500e-003	144.0071	
Mobile	0.0784	0.3515	0.9430	3.0700e-003	0.2556	3.0900e-003	0.2587	0.0685	2.9000e-003	0.0714	0.0000	282.7536	282.7536	0.0154	0.0000	283.1381	
Waste						0.0000	0.0000		0.0000	0.0000	17.5973	0.0000	17.5973	1.0400	0.0000	43.5965	
Water						0.0000	0.0000		0.0000	0.0000	1.9637	33.7332	35.6969	0.2033	5.1000e-003	42.2996	
<b>Total</b>	<b>0.6256</b>	<b>0.3923</b>	<b>1.6651</b>	<b>3.3200e-003</b>	<b>0.2556</b>	<b>9.6100e-003</b>	<b>0.2652</b>	<b>0.0685</b>	<b>9.4200e-003</b>	<b>0.0779</b>	<b>19.5610</b>	<b>460.9807</b>	<b>480.5417</b>	<b>1.2656</b>	<b>6.8500e-003</b>	<b>514.2227</b>	

## Sandpiper Villa Residential Care - San Diego County, Annual

**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	0.5435	8.1900e-003	0.7083	4.0000e-005		3.8900e-003	3.8900e-003		3.8900e-003	3.8900e-003	0.0000	1.1532	1.1532	1.1300e-003	0.0000	1.1814	
Energy	3.8100e-003	0.0325	0.0138	2.1000e-004		2.6300e-003	2.6300e-003		2.6300e-003	2.6300e-003	0.0000	143.3407	143.3407	5.8300e-003	1.7500e-003	144.0071	
Mobile	0.0784	0.3515	0.9430	3.0700e-003	0.2556	3.0900e-003	0.2587	0.0685	2.9000e-003	0.0714	0.0000	282.7536	282.7536	0.0154	0.0000	283.1381	
Waste						0.0000	0.0000		0.0000	0.0000	17.5973	0.0000	17.5973	1.0400	0.0000	43.5965	
Water						0.0000	0.0000		0.0000	0.0000	1.9637	33.7332	35.6969	0.2033	5.1000e-003	42.2996	
<b>Total</b>	<b>0.6256</b>	<b>0.3923</b>	<b>1.6651</b>	<b>3.3200e-003</b>	<b>0.2556</b>	<b>9.6100e-003</b>	<b>0.2652</b>	<b>0.0685</b>	<b>9.4200e-003</b>	<b>0.0779</b>	<b>19.5610</b>	<b>460.9807</b>	<b>480.5417</b>	<b>1.2656</b>	<b>6.8500e-003</b>	<b>514.2227</b>	

  

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

**3.0 Construction Detail****Construction Phase**

## Sandpiper Villa Residential Care - San Diego County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/3/2019	6/3/2019	5	1	
2	Site Preparation	Site Preparation	6/4/2019	6/5/2019	5	2	
3	Grading	Grading	6/6/2019	6/11/2019	5	4	
4	Building Construction	Building Construction	6/12/2019	5/12/2020	5	240	
5	Paving	Paving	5/13/2020	5/26/2020	5	10	
6	Architectural Coating	Architectural Coating	5/27/2020	6/9/2020	5	10	

**Acres of Grading (Site Preparation Phase): 3**

**Acres of Grading (Grading Phase): 3**

**Acres of Paving: 0.5**

**Residential Indoor: 192,375; Residential Outdoor: 64,125; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,344 (Architectural Coating – sqft)**

**OffRoad Equipment**

## Sandpiper Villa Residential Care - San Diego 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	1	8.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Scrapers	1	8.00	367	0.48
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

## Sandpiper Villa Residential Care - San Diego County, Annual

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
Demolition	5	13.00	0.00	16.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	939.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	78.00	14.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction****3.2 Demolition - 2019****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					1.7300e-003	0.0000	1.7300e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1500e-003	0.0113	7.4500e-003	1.0000e-005	6.4000e-004	6.4000e-004		6.0000e-004	6.0000e-004	0.0000	1.0708	1.0708	2.7000e-004	0.0000	1.0776	
Total	1.1500e-003	0.0113	7.4500e-003	1.0000e-005	1.7300e-003	6.4000e-004	2.3700e-003	2.6000e-004	6.0000e-004	8.6000e-004	0.0000	1.0708	1.0708	2.7000e-004	0.0000	1.0776

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**3.2 Demolition - 2019****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	7.0000e-005	2.4500e-003	5.3000e-004	1.0000e-005	1.4000e-004	1.0000e-005	1.5000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.6237	0.6237	6.0000e-005	0.0000	0.6251	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	3.0000e-005	2.0000e-005	1.9000e-004	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0487	0.0487	0.0000	0.0000	0.0487	
<b>Total</b>	<b>1.0000e-004</b>	<b>2.4700e-003</b>	<b>7.2000e-004</b>	<b>1.0000e-005</b>	<b>1.9000e-004</b>	<b>1.0000e-005</b>	<b>2.0000e-004</b>	<b>5.0000e-005</b>	<b>1.0000e-005</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.6723</b>	<b>0.6723</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.6738</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					1.7300e-003	0.0000	1.7300e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	1.1500e-003	0.0113	7.4500e-003	1.0000e-005		6.4000e-004	6.4000e-004		6.0000e-004	6.0000e-004	0.0000	1.0708	1.0708	2.7000e-004	0.0000	1.0776	
<b>Total</b>	<b>1.1500e-003</b>	<b>0.0113</b>	<b>7.4500e-003</b>	<b>1.0000e-005</b>	<b>1.7300e-003</b>	<b>6.4000e-004</b>	<b>2.3700e-003</b>	<b>2.6000e-004</b>	<b>6.0000e-004</b>	<b>8.6000e-004</b>	<b>0.0000</b>	<b>1.0708</b>	<b>1.0708</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>1.0776</b>	

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**3.2 Demolition - 2019****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	7.0000e-005	2.4500e-003	5.3000e-004	1.0000e-005	1.4000e-004	1.0000e-005	1.5000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.6237	0.6237	6.0000e-005	0.0000	0.6251	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	3.0000e-005	2.0000e-005	1.9000e-004	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0487	0.0487	0.0000	0.0000	0.0487	
Total	1.0000e-004	2.4700e-003	7.2000e-004	1.0000e-005	1.9000e-004	1.0000e-005	2.0000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.6723	0.6723	6.0000e-005	0.0000	0.6738	

**3.3 Site Preparation - 2019****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					1.5900e-003	0.0000	1.5900e-003	1.7000e-004	0.0000	1.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7600e-003	0.0215	0.0119	2.0000e-005		8.5000e-004	8.5000e-004		7.9000e-004	7.9000e-004	0.0000	2.2013	2.2013	7.0000e-004	0.0000	2.2187
Total	1.7600e-003	0.0215	0.0119	2.0000e-005	1.5900e-003	8.5000e-004	2.4400e-003	1.7000e-004	7.9000e-004	9.6000e-004	0.0000	2.2013	2.2013	7.0000e-004	0.0000	2.2187

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**3.3 Site Preparation - 2019****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	3.0000e-005	2.0000e-005	2.3000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0599	0.0599	0.0000	0.0000	0.0000	0.0599	
Total	3.0000e-005	2.0000e-005	2.3000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0599	0.0599	0.0000	0.0000	0.0000	0.0599	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Fugitive Dust					1.5900e-003	0.0000	1.5900e-003	1.7000e-004	0.0000	1.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	1.7600e-003	0.0215	0.0119	2.0000e-005		8.5000e-004	8.5000e-004		7.9000e-004	7.9000e-004	0.0000	2.2013	2.2013	7.0000e-004	0.0000	2.2187	
Total	1.7600e-003	0.0215	0.0119	2.0000e-005	1.5900e-003	8.5000e-004	2.4400e-003	1.7000e-004	7.9000e-004	9.6000e-004	0.0000	2.2013	2.2013	7.0000e-004	0.0000	2.2187	

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**3.3 Site Preparation - 2019****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	3.0000e-005	2.0000e-005	2.3000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0599	0.0599	0.0000	0.0000	0.0000	0.0599	
Total	3.0000e-005	2.0000e-005	2.3000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0599	0.0599	0.0000	0.0000	0.0000	0.0599	

**3.4 Grading - 2019****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					0.0142	0.0000	0.0142	6.8700e-003	0.0000	6.8700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0600e-003	0.0455	0.0203	4.0000e-005		2.1500e-003	2.1500e-003		1.9700e-003	1.9700e-003	0.0000	3.7036	3.7036	1.1700e-003	0.0000	3.7329
Total	4.0600e-003	0.0455	0.0203	4.0000e-005	0.0142	2.1500e-003	0.0163	6.8700e-003	1.9700e-003	8.8400e-003	0.0000	3.7036	3.7036	1.1700e-003	0.0000	3.7329

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**3.4 Grading - 2019****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	4.1200e-003	0.1439	0.0314	3.7000e-004	8.0300e-003	5.4000e-004	8.5700e-003	2.2100e-003	5.1000e-004	2.7200e-003	0.0000	36.6020	36.6020	3.3100e-003	0.0000	36.6848	
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	8.0000e-005	6.0000e-005	5.9000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1497	0.1497	0.0000	0.0000	0.1498	
Total	4.2000e-003	0.1439	0.0320	3.7000e-004	8.1900e-003	5.4000e-004	8.7300e-003	2.2500e-003	5.1000e-004	2.7600e-003	0.0000	36.7517	36.7517	3.3100e-003	0.0000	36.8346	

**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					0.0142	0.0000	0.0142	6.8700e-003	0.0000	6.8700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	4.0600e-003	0.0455	0.0203	4.0000e-005		2.1500e-003	2.1500e-003		1.9700e-003	1.9700e-003	0.0000	3.7036	3.7036	1.1700e-003	0.0000	3.7329	
Total	4.0600e-003	0.0455	0.0203	4.0000e-005	0.0142	2.1500e-003	0.0163	6.8700e-003	1.9700e-003	8.8400e-003	0.0000	3.7036	3.7036	1.1700e-003	0.0000	3.7329	

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**3.4 Grading - 2019****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	4.1200e-003	0.1439	0.0314	3.7000e-004	8.0300e-003	5.4000e-004	8.5700e-003	2.2100e-003	5.1000e-004	2.7200e-003	0.0000	36.6020	36.6020	3.3100e-003	0.0000	36.6848	
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	8.0000e-005	6.0000e-005	5.9000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1497	0.1497	0.0000	0.0000	0.1498	
Total	4.2000e-003	0.1439	0.0320	3.7000e-004	8.1900e-003	5.4000e-004	8.7300e-003	2.2500e-003	5.1000e-004	2.7600e-003	0.0000	36.7517	36.7517	3.3100e-003	0.0000	36.8346	

**3.5 Building Construction - 2019****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	0.1855	1.3710	1.1060	1.8100e-003		0.0790	0.0790		0.0758	0.0758	0.0000	152.0719	152.0719	0.0316	0.0000	152.8628	
Total	0.1855	1.3710	1.1060	1.8100e-003		0.0790	0.0790		0.0758	0.0758	0.0000	152.0719	152.0719	0.0316	0.0000	152.8628	

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**3.5 Building Construction - 2019****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	4.7500e-003	0.1274	0.0342	2.8000e-004	6.7400e-003	8.8000e-004	7.6200e-003	1.9500e-003	8.4000e-004	2.7900e-003	0.0000	26.9663	26.9663	2.1600e-003	0.0000	27.0204	
Worker	0.0223	0.0171	0.1655	4.7000e-004	0.0454	3.3000e-004	0.0457	0.0121	3.1000e-004	0.0124	0.0000	42.3275	42.3275	1.3600e-003	0.0000	42.3615	
<b>Total</b>	<b>0.0270</b>	<b>0.1445</b>	<b>0.1997</b>	<b>7.5000e-004</b>	<b>0.0521</b>	<b>1.2100e-003</b>	<b>0.0533</b>	<b>0.0140</b>	<b>1.1500e-003</b>	<b>0.0152</b>	<b>0.0000</b>	<b>69.2938</b>	<b>69.2938</b>	<b>3.5200e-003</b>	<b>0.0000</b>	<b>69.3819</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1855	1.3710	1.1060	1.8100e-003		0.0790	0.0790		0.0758	0.0758	0.0000	152.0717	152.0717	0.0316	0.0000	152.8626	
<b>Total</b>	<b>0.1855</b>	<b>1.3710</b>	<b>1.1060</b>	<b>1.8100e-003</b>		<b>0.0790</b>	<b>0.0790</b>		<b>0.0758</b>	<b>0.0758</b>	<b>0.0000</b>	<b>152.0717</b>	<b>152.0717</b>	<b>0.0316</b>	<b>0.0000</b>	<b>152.8626</b>	

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**3.5 Building Construction - 2019****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	4.7500e-003	0.1274	0.0342	2.8000e-004	6.7400e-003	8.8000e-004	7.6200e-003	1.9500e-003	8.4000e-004	2.7900e-003	0.0000	26.9663	26.9663	2.1600e-003	0.0000	27.0204	
Worker	0.0223	0.0171	0.1655	4.7000e-004	0.0454	3.3000e-004	0.0457	0.0121	3.1000e-004	0.0124	0.0000	42.3275	42.3275	1.3600e-003	0.0000	42.3615	
Total	0.0270	0.1445	0.1997	7.5000e-004	0.0521	1.2100e-003	0.0533	0.0140	1.1500e-003	0.0152	0.0000	69.2938	69.2938	3.5200e-003	0.0000	69.3819	

**3.5 Building Construction - 2020****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	0.1087	0.8281	0.7076	1.1900e-003		0.0450	0.0450		0.0432	0.0432	0.0000	98.6311	98.6311	0.0200	0.0000	99.1315	
Total	0.1087	0.8281	0.7076	1.1900e-003		0.0450	0.0450		0.0432	0.0432	0.0000	98.6311	98.6311	0.0200	0.0000	99.1315	

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**3.5 Building Construction - 2020****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	2.5300e-003	0.0758	0.0201	1.8000e-004	4.4100e-003	3.7000e-004	4.7800e-003	1.2700e-003	3.5000e-004	1.6300e-003	0.0000	17.5468	17.5468	1.3400e-003	0.0000	17.5804	
Worker	0.0137	0.0101	0.0991	3.0000e-004	0.0297	2.1000e-004	0.0299	7.9000e-003	2.0000e-004	8.0900e-003	0.0000	26.8566	26.8566	8.1000e-004	0.0000	26.8768	
<b>Total</b>	<b>0.0162</b>	<b>0.0859</b>	<b>0.1193</b>	<b>4.8000e-004</b>	<b>0.0341</b>	<b>5.8000e-004</b>	<b>0.0347</b>	<b>9.1700e-003</b>	<b>5.5000e-004</b>	<b>9.7200e-003</b>	<b>0.0000</b>	<b>44.4034</b>	<b>44.4034</b>	<b>2.1500e-003</b>	<b>0.0000</b>	<b>44.4572</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1087	0.8281	0.7076	1.1900e-003		0.0450	0.0450		0.0432	0.0432	0.0000	98.6310	98.6310	0.0200	0.0000	99.1314	
<b>Total</b>	<b>0.1087</b>	<b>0.8281</b>	<b>0.7076</b>	<b>1.1900e-003</b>		<b>0.0450</b>	<b>0.0450</b>		<b>0.0432</b>	<b>0.0432</b>	<b>0.0000</b>	<b>98.6310</b>	<b>98.6310</b>	<b>0.0200</b>	<b>0.0000</b>	<b>99.1314</b>	

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**3.5 Building Construction - 2020****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	2.5300e-003	0.0758	0.0201	1.8000e-004	4.4100e-003	3.7000e-004	4.7800e-003	1.2700e-003	3.5000e-004	1.6300e-003	0.0000	17.5468	17.5468	1.3400e-003	0.0000	17.5804	
Worker	0.0137	0.0101	0.0991	3.0000e-004	0.0297	2.1000e-004	0.0299	7.9000e-003	2.0000e-004	8.0900e-003	0.0000	26.8566	26.8566	8.1000e-004	0.0000	26.8768	
Total	0.0162	0.0859	0.1193	4.8000e-004	0.0341	5.8000e-004	0.0347	9.1700e-003	5.5000e-004	9.7200e-003	0.0000	44.4034	44.4034	2.1500e-003	0.0000	44.4572	

**3.6 Paving - 2020****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	5.7700e-003	0.0579	0.0590	9.0000e-005		3.2800e-003	3.2800e-003	3.0300e-003	3.0300e-003	0.0000	7.7529	7.7529	2.4600e-003	0.0000	7.8143	
Paving	6.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	6.4300e-003	0.0579	0.0590	9.0000e-005		3.2800e-003	3.2800e-003		3.0300e-003	3.0300e-003	0.0000	7.7529	7.7529	2.4600e-003	0.0000	7.8143

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**3.6 Paving - 2020****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	2.8000e-004	2.0000e-004	2.0100e-003	1.0000e-005	6.0000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5437	0.5437	2.0000e-005	0.0000	0.5441	
Total	2.8000e-004	2.0000e-004	2.0100e-003	1.0000e-005	6.0000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5437	0.5437	2.0000e-005	0.0000	0.5441	

**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	5.7700e-003	0.0579	0.0590	9.0000e-005		3.2800e-003	3.2800e-003		3.0300e-003	3.0300e-003	0.0000	7.7529	7.7529	2.4600e-003	0.0000	7.8143
Paving	6.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.4300e-003	0.0579	0.0590	9.0000e-005		3.2800e-003	3.2800e-003		3.0300e-003	3.0300e-003	0.0000	7.7529	7.7529	2.4600e-003	0.0000	7.8143

## Sandpiper Villa Residential Care - San Diego County, Annual

**3.6 Paving - 2020****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.0000e-004	2.0100e-003	1.0000e-005	6.0000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5437	0.5437	2.0000e-005	0.0000	0.5441
Total	2.8000e-004	2.0000e-004	2.0100e-003	1.0000e-005	6.0000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5437	0.5437	2.0000e-005	0.0000	0.5441

**3.7 Architectural Coating - 2020****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	0.2988						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2100e-003	8.4200e-003	9.1600e-003	1.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	1.2766	1.2766	1.0000e-004	0.0000	1.2791
Total	0.3000	8.4200e-003	9.1600e-003	1.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	1.2766	1.2766	1.0000e-004	0.0000	1.2791

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**3.7 Architectural Coating - 2020****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	2.9000e-004	2.2000e-004	2.1400e-003	1.0000e-005	6.4000e-004	0.0000	6.5000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5799	0.5799	2.0000e-005	0.0000	0.5803	
Total	2.9000e-004	2.2000e-004	2.1400e-003	1.0000e-005	6.4000e-004	0.0000	6.5000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5799	0.5799	2.0000e-005	0.0000	0.5803	

**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	0.2988						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	1.2100e-003	8.4200e-003	9.1600e-003	1.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	1.2766	1.2766	1.0000e-004	0.0000	1.2791	
Total	0.3000	8.4200e-003	9.1600e-003	1.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	1.2766	1.2766	1.0000e-004	0.0000	1.2791	

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**3.7 Architectural Coating - 2020****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	2.9000e-004	2.2000e-004	2.1400e-003	1.0000e-005	6.4000e-004	0.0000	6.5000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5799	0.5799	2.0000e-005	0.0000	0.5803	
Total	2.9000e-004	2.2000e-004	2.1400e-003	1.0000e-005	6.4000e-004	0.0000	6.5000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5799	0.5799	2.0000e-005	0.0000	0.5803	

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr												MT/yr				
Mitigated	0.0784	0.3515	0.9430	3.0700e-003	0.2556	3.0900e-003	0.2587	0.0685	2.9000e-003	0.0714	0.0000	282.7536	282.7536	0.0154	0.0000	283.1381	
Unmitigated	0.0784	0.3515	0.9430	3.0700e-003	0.2556	3.0900e-003	0.2587	0.0685	2.9000e-003	0.0714	0.0000	282.7536	282.7536	0.0154	0.0000	283.1381	

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
Congregate Care (Assisted Living)	237.50	237.50	237.50	678,135		678,135	
Parking Lot	0.00	0.00	0.00				
Total	237.50	237.50	237.50	678,135		678,135	

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Congregate Care (Assisted Living)	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Parking Lot	9.50	7.30	7.30	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
Congregate Care (Assisted Living)	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Parking Lot	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

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## 5.0 Energy Detail

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Historical Energy Use: N

### 5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	105.6802	105.6802	5.1100e-003	1.0600e-003	106.1229	
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	105.6802	105.6802	5.1100e-003	1.0600e-003	106.1229	
NaturalGas Mitigated	3.8100e-003	0.0325	0.0138	2.1000e-004			2.6300e-003	2.6300e-003		2.6300e-003	2.6300e-003	0.0000	37.6605	37.6605	7.2000e-004	6.9000e-004	37.8843
NaturalGas Unmitigated	3.8100e-003	0.0325	0.0138	2.1000e-004			2.6300e-003	2.6300e-003		2.6300e-003	2.6300e-003	0.0000	37.6605	37.6605	7.2000e-004	6.9000e-004	37.8843

## Sandpiper Villa Residential Care - San Diego County, Annual

**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)	705730	3.8100e-003	0.0325	0.0138	2.1000e-004		2.6300e-003	2.6300e-003		2.6300e-003	2.6300e-003	0.0000	37.6605	37.6605	7.2000e-004	6.9000e-004	37.8843
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>3.8100e-003</b>	<b>0.0325</b>	<b>0.0138</b>	<b>2.1000e-004</b>		<b>2.6300e-003</b>	<b>2.6300e-003</b>		<b>2.6300e-003</b>	<b>2.6300e-003</b>	<b>0.0000</b>	<b>37.6605</b>	<b>37.6605</b>	<b>7.2000e-004</b>	<b>6.9000e-004</b>	<b>37.8843</b>

**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)	705730	3.8100e-003	0.0325	0.0138	2.1000e-004		2.6300e-003	2.6300e-003		2.6300e-003	2.6300e-003	0.0000	37.6605	37.6605	7.2000e-004	6.9000e-004	37.8843
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>3.8100e-003</b>	<b>0.0325</b>	<b>0.0138</b>	<b>2.1000e-004</b>		<b>2.6300e-003</b>	<b>2.6300e-003</b>		<b>2.6300e-003</b>	<b>2.6300e-003</b>	<b>0.0000</b>	<b>37.6605</b>	<b>37.6605</b>	<b>7.2000e-004</b>	<b>6.9000e-004</b>	<b>37.8843</b>

## Sandpiper Villa Residential Care - San Diego County, Annual

**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)	380468	103.5465	5.0000e-003	1.0400e-003	103.9802
Parking Lot	7840	2.1337	1.0000e-004	2.0000e-005	2.1426
<b>Total</b>		<b>105.6802</b>	<b>5.1000e-003</b>	<b>1.0600e-003</b>	<b>106.1229</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Congregate Care (Assisted Living)	380468	103.5465	5.0000e-003	1.0400e-003	103.9802
Parking Lot	7840	2.1337	1.0000e-004	2.0000e-005	2.1426
<b>Total</b>		<b>105.6802</b>	<b>5.1000e-003</b>	<b>1.0600e-003</b>	<b>106.1229</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

## Sandpiper Villa Residential Care - San Diego County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	0.5435	8.1900e-003	0.7083	4.0000e-005		3.8900e-003	3.8900e-003		3.8900e-003	3.8900e-003	0.0000	1.1532	1.1532	1.1300e-003	0.0000	1.1814	
Unmitigated	0.5435	8.1900e-003	0.7083	4.0000e-005		3.8900e-003	3.8900e-003		3.8900e-003	3.8900e-003	0.0000	1.1532	1.1532	1.1300e-003	0.0000	1.1814	

**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	0.1494					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products	0.3725					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Landscaping	0.0216	8.1900e-003	0.7083	4.0000e-005		3.8900e-003	3.8900e-003		3.8900e-003	3.8900e-003	0.0000	1.1532	1.1532	1.1300e-003	0.0000	1.1814	
<b>Total</b>	<b>0.5435</b>	<b>8.1900e-003</b>	<b>0.7083</b>	<b>4.0000e-005</b>		<b>3.8900e-003</b>	<b>3.8900e-003</b>		<b>3.8900e-003</b>	<b>3.8900e-003</b>	<b>0.0000</b>	<b>1.1532</b>	<b>1.1532</b>	<b>1.1300e-003</b>	<b>0.0000</b>	<b>1.1814</b>	

## Sandpiper Villa Residential Care - San Diego County, Annual

**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	0.1494					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3725					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0216	8.1900e-003	0.7083	4.0000e-005		3.8900e-003	3.8900e-003		3.8900e-003	3.8900e-003	0.0000	1.1532	1.1532	1.1300e-003	0.0000	1.1814
<b>Total</b>	<b>0.5435</b>	<b>8.1900e-003</b>	<b>0.7083</b>	<b>4.0000e-005</b>		<b>3.8900e-003</b>	<b>3.8900e-003</b>		<b>3.8900e-003</b>	<b>3.8900e-003</b>	<b>0.0000</b>	<b>1.1532</b>	<b>1.1532</b>	<b>1.1300e-003</b>	<b>0.0000</b>	<b>1.1814</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

## Sandpiper Villa Residential Care - San Diego County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	35.6969	0.2033	5.1000e-003	42.2996
Unmitigated	35.6969	0.2033	5.1000e-003	42.2996

**7.2 Water by Land Use****Unmitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Congregate Care (Assisted Living)	6.18963 / 3.90216	35.6969	0.2033	5.1000e-003	42.2996
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000

  

Total		35.6969	0.2033	5.1000e-003	42.2996

## Sandpiper Villa Residential Care - San Diego County, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Congregate Care (Assisted Living)	6.18963 / 3.90216	35.6969	0.2033	5.1000e- 003	42.2996
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>35.6969</b>	<b>0.2033</b>	<b>5.1000e- 003</b>	<b>42.2996</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	17.5973	1.0400	0.0000	43.5965
Unmitigated	17.5973	1.0400	0.0000	43.5965

## Sandpiper Villa Residential Care - San Diego County, Annual

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Congregate Care (Assisted Living)	86.69	17.5973	1.0400	0.0000	43.5965
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>17.5973</b>	<b>1.0400</b>	<b>0.0000</b>	<b>43.5965</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Congregate Care (Assisted Living)	86.69	17.5973	1.0400	0.0000	43.5965
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>17.5973</b>	<b>1.0400</b>	<b>0.0000</b>	<b>43.5965</b>

**9.0 Operational Offroad**

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

## 10.0 Stationary Equipment

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### Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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### User Defined Equipment

Equipment Type	Number
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## 11.0 Vegetation

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## Sandpiper Villa Residential Care - San Diego County, Summer

**Sandpiper Villa Residential Care**  
**San Diego County, Summer**

**1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Congregate Care (Assisted Living)	95.00	Dwelling Unit	1.50	95,000.00	272
Parking Lot	56.00	Space	0.50	22,400.00	0

**1.2 Other Project Characteristics**

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	600	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

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

## Sandpiper Villa Residential Care - San Diego County, Summer

Project Characteristics - Energy Policy Initiatives Center, 2017

Land Use - Up to 95 rooms and 56 parking spaces

Construction Phase - \* Construction is estimated to take approximately one year

Grading - 7,510 cy of soil export

Demolition - estimate for existing concrete slabs on site

Architectural Coating - SDAPCD Rule 67.0.1 Architectural Coatings

Vehicle Trips - Transportation Impact Study, Chen Ryan, 2019

Woodstoves - No woodstoves or fireplaces

Energy Use -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblConstructionPhase	NumDays	200.00	240.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	PhaseEndDate	5/11/2020	6/9/2020
tblConstructionPhase	PhaseEndDate	4/13/2020	5/12/2020
tblConstructionPhase	PhaseEndDate	6/28/2019	6/3/2019
tblConstructionPhase	PhaseEndDate	7/8/2019	6/11/2019
tblConstructionPhase	PhaseEndDate	4/27/2020	5/26/2020
tblConstructionPhase	PhaseEndDate	7/2/2019	6/5/2019
tblConstructionPhase	PhaseStartDate	4/28/2020	5/27/2020
tblConstructionPhase	PhaseStartDate	7/9/2019	6/12/2019
tblConstructionPhase	PhaseStartDate	7/3/2019	6/6/2019

## Sandpiper Villa Residential Care - San Diego County, Summer

tblConstructionPhase	PhaseStartDate	4/14/2020	5/13/2020
tblConstructionPhase	PhaseStartDate	6/29/2019	6/4/2019
tblFireplaces	NumberGas	52.25	0.00
tblFireplaces	NumberNoFireplace	9.50	0.00
tblFireplaces	NumberWood	33.25	0.00
tblGrading	AcresOfGrading	2.00	3.00
tblGrading	MaterialExported	0.00	7,510.00
tblLandUse	LotAcreage	5.94	1.50
tblProjectCharacteristics	CO2IntensityFactor	720.49	600
tblVehicleTrips	ST_TR	2.20	2.50
tblVehicleTrips	SU_TR	2.44	2.50
tblVehicleTrips	WD_TR	2.74	2.50
tblWoodstoves	NumberCatalytic	4.75	0.00
tblWoodstoves	NumberNoncatalytic	4.75	0.00

**2.0 Emissions Summary**

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Sandpiper Villa Residential Care - San Diego County, Summer

## 2.1 Overall Construction (Maximum Daily Emission)

## Unmitigated Construction

## **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						
2019	4.1056	93.2843	25.6823	0.2078	11.2655	1.3397	12.6051	4.5820	1.2423	5.8243	0.0000	22,445.24	22,445.24	2.4466	0.0000	22,506.41	
2020	60.0562	19.2051	17.5103	0.0354	0.7355	0.9604	1.6959	0.1972	0.9204	1.1177	0.0000	3,357.886	3,357.886	0.5455	0.0000	3,370.750	
Maximum	60.0562	93.2843	25.6823	0.2078	11.2655	1.3397	12.6051	4.5820	1.2423	5.8243	0.0000	22,445.24	22,445.24	2.4466	0.0000	22,506.41	

## Sandpiper Villa Residential Care - San Diego County, Summer

**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	3.0995	0.0910	7.8694	4.1000e-004			0.0433	0.0433		0.0433	0.0433	0.0000	14.1247	14.1247	0.0138	0.0000	14.4696
Energy	0.0209	0.1782	0.0758	1.1400e-003			0.0144	0.0144		0.0144	0.0144	227.4715	227.4715	4.3600e-003	4.1700e-003	228.8232	
Mobile	0.4535	1.8686	5.3247	0.0176	1.4380	0.0170	1.4550	0.3844	0.0159	0.4003		1,789.475 8	1,789.475 8	0.0938		1,791.821 9	
<b>Total</b>	<b>3.5739</b>	<b>2.1378</b>	<b>13.2700</b>	<b>0.0192</b>	<b>1.4380</b>	<b>0.0746</b>	<b>1.5127</b>	<b>0.3844</b>	<b>0.0736</b>	<b>0.4580</b>	<b>0.0000</b>	<b>2,031.072 0</b>	<b>2,031.072 0</b>	<b>0.1120</b>	<b>4.1700e-003</b>	<b>2,035.114 7</b>	

**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	3.0995	0.0910	7.8694	4.1000e-004			0.0433	0.0433		0.0433	0.0433	0.0000	14.1247	14.1247	0.0138	0.0000	14.4696
Energy	0.0209	0.1782	0.0758	1.1400e-003			0.0144	0.0144		0.0144	0.0144	227.4715	227.4715	4.3600e-003	4.1700e-003	228.8232	
Mobile	0.4535	1.8686	5.3247	0.0176	1.4380	0.0170	1.4550	0.3844	0.0159	0.4003		1,789.475 8	1,789.475 8	0.0938		1,791.821 9	
<b>Total</b>	<b>3.5739</b>	<b>2.1378</b>	<b>13.2700</b>	<b>0.0192</b>	<b>1.4380</b>	<b>0.0746</b>	<b>1.5127</b>	<b>0.3844</b>	<b>0.0736</b>	<b>0.4580</b>	<b>0.0000</b>	<b>2,031.072 0</b>	<b>2,031.072 0</b>	<b>0.1120</b>	<b>4.1700e-003</b>	<b>2,035.114 7</b>	

## Sandpiper Villa Residential Care - San Diego County, Summer

	ROG	NOx	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	Demolition	Demolition	6/3/2019	6/3/2019	5	1	
2	Site Preparation	Site Preparation	6/4/2019	6/5/2019	5	2	
3	Grading	Grading	6/6/2019	6/11/2019	5	4	
4	Building Construction	Building Construction	6/12/2019	5/12/2020	5	240	
5	Paving	Paving	5/13/2020	5/26/2020	5	10	
6	Architectural Coating	Architectural Coating	5/27/2020	6/9/2020	5	10	

Acres of Grading (Site Preparation Phase): 3

Acres of Grading (Grading Phase): 3

Acres of Paving: 0.5

Residential Indoor: 192,375; Residential Outdoor: 64,125; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,344 (Architectural Coating – sqft)

#### OffRoad Equipment

## Sandpiper Villa Residential Care - San Diego County, Summer

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	1	8.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Scrapers	1	8.00	367	0.48
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

## Sandpiper Villa Residential Care - San Diego County, Summer

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
Demolition	5	13.00	0.00	16.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	939.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	78.00	14.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction****3.2 Demolition - 2019****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					3.4666	0.0000	3.4666	0.5250	0.0000	0.5250			0.0000			0.0000
Off-Road	2.2950	22.6751	14.8943	0.0241		1.2863	1.2863		1.2017	1.2017	2,360.719 8	2,360.719 8	0.6011			2,375.747 5
Total	2.2950	22.6751	14.8943	0.0241	3.4666	1.2863	4.7529	0.5250	1.2017	1.7267	2,360.719 8	2,360.719 8	0.6011			2,375.747 5

## Sandpiper Villa Residential Care - San Diego County, Summer

**3.2 Demolition - 2019****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	0.1389	4.8060	1.0374	0.0127	0.2796	0.0181	0.2977	0.0766	0.0174	0.0940	1,384.756 3	1,384.756 3	0.1225			1,387.820 0
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0510	0.0356	0.4022	1.1400e-003	0.1068	7.6000e-004	0.1076	0.0283	7.0000e-004	0.0290	113.1260	113.1260	3.6100e-003			113.2163
<b>Total</b>	<b>0.1899</b>	<b>4.8416</b>	<b>1.4397</b>	<b>0.0138</b>	<b>0.3864</b>	<b>0.0189</b>	<b>0.4053</b>	<b>0.1050</b>	<b>0.0181</b>	<b>0.1230</b>	<b>1,497.882 3</b>	<b>1,497.882 3</b>	<b>0.1262</b>			<b>1,501.036 2</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.4666	0.0000	3.4666	0.5250	0.0000	0.5250			0.0000			0.0000
Off-Road	2.2950	22.6751	14.8943	0.0241		1.2863	1.2863		1.2017	1.2017	0.0000	2,360.719 7	2,360.719 7	0.6011		2,375.747 5
<b>Total</b>	<b>2.2950</b>	<b>22.6751</b>	<b>14.8943</b>	<b>0.0241</b>	<b>3.4666</b>	<b>1.2863</b>	<b>4.7529</b>	<b>0.5250</b>	<b>1.2017</b>	<b>1.7267</b>	<b>0.0000</b>	<b>2,360.719 7</b>	<b>2,360.719 7</b>	<b>0.6011</b>		<b>2,375.747 5</b>

## Sandpiper Villa Residential Care - San Diego County, Summer

**3.2 Demolition - 2019****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	0.1389	4.8060	1.0374	0.0127	0.2796	0.0181	0.2977	0.0766	0.0174	0.0940	1,384.756 3	1,384.756 3	0.1225			1,387.820 0
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0510	0.0356	0.4022	1.1400e-003	0.1068	7.6000e-004	0.1076	0.0283	7.0000e-004	0.0290	113.1260	113.1260	3.6100e-003			113.2163
Total	0.1899	4.8416	1.4397	0.0138	0.3864	0.0189	0.4053	0.1050	0.0181	0.1230	1,497.882 3	1,497.882 3	0.1262			1,501.036 2

**3.3 Site Preparation - 2019****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					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.7557	21.5386	11.9143	0.0245		0.8537	0.8537		0.7854	0.7854	2,426.540 8	2,426.540 8	0.7677			2,445.734 1
Total	1.7557	21.5386	11.9143	0.0245	1.5908	0.8537	2.4445	0.1718	0.7854	0.9572	2,426.540 8	2,426.540 8	0.7677			2,445.734 1

## Sandpiper Villa Residential Care - San Diego County, Summer

**3.3 Site Preparation - 2019****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0314	0.0219	0.2475	7.0000e-004	0.0657	4.7000e-004	0.0662	0.0174	4.3000e-004	0.0179	69.6160	69.6160	2.2200e-003	69.6716		
<b>Total</b>	<b>0.0314</b>	<b>0.0219</b>	<b>0.2475</b>	<b>7.0000e-004</b>	<b>0.0657</b>	<b>4.7000e-004</b>	<b>0.0662</b>	<b>0.0174</b>	<b>4.3000e-004</b>	<b>0.0179</b>	<b>69.6160</b>	<b>69.6160</b>	<b>2.2200e-003</b>		<b>69.6716</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7557	21.5386	11.9143	0.0245		0.8537	0.8537		0.7854	0.7854	0.0000	2,426.5408	2,426.5408	0.7677		2,445.7341
<b>Total</b>	<b>1.7557</b>	<b>21.5386</b>	<b>11.9143</b>	<b>0.0245</b>	<b>1.5908</b>	<b>0.8537</b>	<b>2.4445</b>	<b>0.1718</b>	<b>0.7854</b>	<b>0.9572</b>	<b>0.0000</b>	<b>2,426.5408</b>	<b>2,426.5408</b>	<b>0.7677</b>		<b>2,445.7341</b>

## Sandpiper Villa Residential Care - San Diego County, Summer

**3.3 Site Preparation - 2019****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0314	0.0219	0.2475	7.0000e-004	0.0657	4.7000e-004	0.0662	0.0174	4.3000e-004	0.0179	69.6160	69.6160	2.2200e-003	69.6716		
Total	0.0314	0.0219	0.2475	7.0000e-004	0.0657	4.7000e-004	0.0662	0.0174	4.3000e-004	0.0179	69.6160	69.6160	2.2200e-003	69.6716		

**3.4 Grading - 2019****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					7.0813	0.0000	7.0813	3.4361	0.0000	3.4361	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0287	22.7444	10.1518	0.0206		1.0730	1.0730		0.9871	0.9871	2,041.253 9	2,041.253 9	0.6458		2,057.399 7	
Total	2.0287	22.7444	10.1518	0.0206	7.0813	1.0730	8.1543	3.4361	0.9871	4.4232	2,041.253 9	2,041.253 9	0.6458		2,057.399 7	

## Sandpiper Villa Residential Care - San Diego County, Summer

**3.4 Grading - 2019****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	2.0377	70.5125	15.2211	0.1863	4.1020	0.2661	4.3681	1.1242	0.2546	1.3788	20,316.97 19	20,316.97 19	1.7980			20,361.92 09	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0393	0.0274	0.3094	8.7000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223	87.0200	87.0200	2.7800e-003			87.0894	
<b>Total</b>	<b>2.0769</b>	<b>70.5399</b>	<b>15.5305</b>	<b>0.1872</b>	<b>4.1842</b>	<b>0.2667</b>	<b>4.4509</b>	<b>1.1460</b>	<b>0.2551</b>	<b>1.4011</b>	<b>20,403.99 19</b>	<b>20,403.99 19</b>	<b>1.8007</b>			<b>20,449.01 04</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0813	0.0000	7.0813	3.4361	0.0000	3.4361	0.0000	0.0000				0.0000
Off-Road	2.0287	22.7444	10.1518	0.0206		1.0730	1.0730		0.9871	0.9871	0.0000	2,041.253 9	2,041.253 9	0.6458		2,057.399 7
<b>Total</b>	<b>2.0287</b>	<b>22.7444</b>	<b>10.1518</b>	<b>0.0206</b>	<b>7.0813</b>	<b>1.0730</b>	<b>8.1543</b>	<b>3.4361</b>	<b>0.9871</b>	<b>4.4232</b>	<b>0.0000</b>	<b>2,041.253 9</b>	<b>2,041.253 9</b>	<b>0.6458</b>		<b>2,057.399 7</b>

## Sandpiper Villa Residential Care - San Diego County, Summer

**3.4 Grading - 2019****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	2.0377	70.5125	15.2211	0.1863	4.1020	0.2661	4.3681	1.1242	0.2546	1.3788	20,316.97 19	20,316.97 19	1.7980			20,361.92 09
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0393	0.0274	0.3094	8.7000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223	87.0200	87.0200	2.7800e-003			87.0894
Total	2.0769	70.5399	15.5305	0.1872	4.1842	0.2667	4.4509	1.1460	0.2551	1.4011	20,403.99 19	20,403.99 19	1.8007			20,449.01 04

**3.5 Building Construction - 2019****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	2.5581	18.9103	15.2545	0.0250		1.0901	1.0901		1.0449	1.0449	2,312.145 4	2,312.145 4	0.4810			2,324.170 5
Total	2.5581	18.9103	15.2545	0.0250		1.0901	1.0901		1.0449	1.0449	2,312.145 4	2,312.145 4	0.4810			2,324.170 5

## Sandpiper Villa Residential Care - San Diego County, Summer

**3.5 Building Construction - 2019****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0644	1.7358	0.4481	3.8700e-003	0.0948	0.0121	0.1069	0.0273	0.0116	0.0388	414.4233	414.4233	0.0320	415.2232			
Worker	0.3063	0.2137	2.4134	6.8100e-003	0.6408	4.5700e-003	0.6453	0.1700	4.2100e-003	0.1742	678.7557	678.7557	0.0217	679.2976			
<b>Total</b>	<b>0.3707</b>	<b>1.9496</b>	<b>2.8616</b>	<b>0.0107</b>	<b>0.7355</b>	<b>0.0167</b>	<b>0.7522</b>	<b>0.1972</b>	<b>0.0158</b>	<b>0.2130</b>	<b>1,093.1790</b>	<b>1,093.1790</b>	<b>0.0537</b>		<b>1,094.5208</b>		

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	2.5581	18.9103	15.2545	0.0250			1.0901	1.0901		1.0449	1.0449	0.0000	2,312.1454	2,312.1454	0.4810	2,324.1705	
<b>Total</b>	<b>2.5581</b>	<b>18.9103</b>	<b>15.2545</b>	<b>0.0250</b>			<b>1.0901</b>	<b>1.0901</b>		<b>1.0449</b>	<b>1.0449</b>	<b>0.0000</b>	<b>2,312.1454</b>	<b>2,312.1454</b>	<b>0.4810</b>		<b>2,324.1705</b>

## Sandpiper Villa Residential Care - San Diego County, Summer

**3.5 Building Construction - 2019****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0644	1.7358	0.4481	3.8700e-003	0.0948	0.0121	0.1069	0.0273	0.0116	0.0388	414.4233	414.4233	0.0320	415.2232		
Worker	0.3063	0.2137	2.4134	6.8100e-003	0.6408	4.5700e-003	0.6453	0.1700	4.2100e-003	0.1742	678.7557	678.7557	0.0217	679.2976		
Total	0.3707	1.9496	2.8616	0.0107	0.7355	0.0167	0.7522	0.1972	0.0158	0.2130	1,093.1790	1,093.1790	0.0537		1,094.5208	

**3.5 Building Construction - 2020****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	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089	2,288.8877	2,288.8877	0.4646		2,300.5014	
Total	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089	2,288.8877	2,288.8877	0.4646		2,300.5014	

## Sandpiper Villa Residential Care - San Diego County, Summer

**3.5 Building Construction - 2020****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0523	1.5786	0.4022	3.8300e-003	0.0948	7.7200e-003	0.1025	0.0273	7.3900e-003	0.0347	411.6561	411.6561	0.0304			412.4153
Worker	0.2862	0.1929	2.2110	6.6000e-003	0.6408	4.5000e-003	0.6453	0.1700	4.1400e-003	0.1741	657.3427	657.3427	0.0196			657.8334
Total	<b>0.3386</b>	<b>1.7715</b>	<b>2.6132</b>	<b>0.0104</b>	<b>0.7355</b>	<b>0.0122</b>	<b>0.7478</b>	<b>0.1972</b>	<b>0.0115</b>	<b>0.2088</b>	<b>1,068.998</b>	<b>1,068.998</b>	<b>0.0500</b>			<b>1,070.248</b>
											8	8				7

**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	2.2879	17.4336	14.8972	0.0250			0.9482	0.9482		0.9089	0.9089	0.0000	2,288.887	2,288.887	0.4646		2,300.501
Total	<b>2.2879</b>	<b>17.4336</b>	<b>14.8972</b>	<b>0.0250</b>			<b>0.9482</b>	<b>0.9482</b>		<b>0.9089</b>	<b>0.9089</b>	<b>0.0000</b>	<b>2,288.887</b>	<b>2,288.887</b>	<b>0.4646</b>		<b>2,300.501</b>
											7	7				4	

## Sandpiper Villa Residential Care - San Diego County, Summer

**3.5 Building Construction - 2020****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0523	1.5786	0.4022	3.8300e-003	0.0948	7.7200e-003	0.1025	0.0273	7.3900e-003	0.0347	411.6561	411.6561	0.0304			412.4153
Worker	0.2862	0.1929	2.2110	6.6000e-003	0.6408	4.5000e-003	0.6453	0.1700	4.1400e-003	0.1741	657.3427	657.3427	0.0196			657.8334
Total	0.3386	1.7715	2.6132	0.0104	0.7355	0.0122	0.7478	0.1972	0.0115	0.2088	1,068.9988	1,068.9988	0.0500			1,070.2487

**3.6 Paving - 2020****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	1.1547	11.5873	11.8076	0.0178		0.6565	0.6565		0.6051	0.6051	1,709.2180	1,709.2180	0.5417			1,722.7605	
Paving	0.1310					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000	
Total	1.2857	11.5873	11.8076	0.0178		0.6565	0.6565		0.6051	0.6051		1,709.2180	1,709.2180	0.5417			1,722.7605

## Sandpiper Villa Residential Care - San Diego County, Summer

**3.6 Paving - 2020****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0550	0.0371	0.4252	1.2700e-003	0.1232	8.6000e-004	0.1241	0.0327	8.0000e-004	0.0335	126.4121	126.4121	3.7700e-003	126.5064		
<b>Total</b>	<b>0.0550</b>	<b>0.0371</b>	<b>0.4252</b>	<b>1.2700e-003</b>	<b>0.1232</b>	<b>8.6000e-004</b>	<b>0.1241</b>	<b>0.0327</b>	<b>8.0000e-004</b>	<b>0.0335</b>		<b>126.4121</b>	<b>126.4121</b>	<b>3.7700e-003</b>		<b>126.5064</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1547	11.5873	11.8076	0.0178		0.6565	0.6565		0.6051	0.6051	0.0000	1,709.2180	1,709.2180	0.5417		1,722.7605
Paving	0.1310					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.2857</b>	<b>11.5873</b>	<b>11.8076</b>	<b>0.0178</b>		<b>0.6565</b>	<b>0.6565</b>		<b>0.6051</b>	<b>0.6051</b>	<b>0.0000</b>	<b>1,709.2180</b>	<b>1,709.2180</b>	<b>0.5417</b>		<b>1,722.7605</b>

## Sandpiper Villa Residential Care - San Diego County, Summer

**3.6 Paving - 2020****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0550	0.0371	0.4252	1.2700e-003	0.1232	8.6000e-004	0.1241	0.0327	8.0000e-004	0.0335	126.4121	126.4121	3.7700e-003	126.5064		
Total	0.0550	0.0371	0.4252	1.2700e-003	0.1232	8.6000e-004	0.1241	0.0327	8.0000e-004	0.0335		126.4121	126.4121	3.7700e-003		126.5064

**3.7 Architectural Coating - 2020****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	59.7554						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	59.9975	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

## Sandpiper Villa Residential Care - San Diego County, Summer

**3.7 Architectural Coating - 2020****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0587	0.0396	0.4535	1.3500e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357	134.8395	134.8395	4.0300e-003			134.9402	
Total	<b>0.0587</b>	<b>0.0396</b>	<b>0.4535</b>	<b>1.3500e-003</b>	<b>0.1314</b>	<b>9.2000e-004</b>	<b>0.1324</b>	<b>0.0349</b>	<b>8.5000e-004</b>	<b>0.0357</b>		<b>134.8395</b>	<b>134.8395</b>	<b>4.0300e-003</b>		<b>134.9402</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	59.7554						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	<b>59.9975</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

## Sandpiper Villa Residential Care - San Diego County, Summer

**3.7 Architectural Coating - 2020****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0587	0.0396	0.4535	1.3500e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357	134.8395	134.8395	4.0300e-003			134.9402
Total	<b>0.0587</b>	<b>0.0396</b>	<b>0.4535</b>	<b>1.3500e-003</b>	<b>0.1314</b>	<b>9.2000e-004</b>	<b>0.1324</b>	<b>0.0349</b>	<b>8.5000e-004</b>	<b>0.0357</b>		<b>134.8395</b>	<b>134.8395</b>	<b>4.0300e-003</b>		<b>134.9402</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Sandpiper Villa Residential Care - San Diego County, Summer

	ROG	NOx	CO	SO2	Fugitive 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	0.4535	1.8686	5.3247	0.0176	1.4380	0.0170	1.4550	0.3844	0.0159	0.4003	1,789.475 8	1,789.475 8	0.0938		1,791.821 9		
Unmitigated	0.4535	1.8686	5.3247	0.0176	1.4380	0.0170	1.4550	0.3844	0.0159	0.4003	1,789.475 8	1,789.475 8	0.0938		1,791.821 9		

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
Congregate Care (Assisted Living)	237.50	237.50	237.50		678,135		678,135
Parking Lot	0.00	0.00	0.00				
Total	237.50	237.50	237.50		678,135		678,135

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Congregate Care (Assisted)	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Parking Lot	9.50	7.30	7.30	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
Congregate Care (Assisted Living)	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Parking Lot	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

## Sandpiper Villa Residential Care - San Diego County, Summer

## 5.0 Energy Detail

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Historical Energy Use: N

### 5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0209	0.1782	0.0758	1.1400e-003			0.0144	0.0144		0.0144	227.4715	227.4715	4.3600e-003	4.1700e-003	228.8232	
NaturalGas Unmitigated	0.0209	0.1782	0.0758	1.1400e-003			0.0144	0.0144		0.0144	227.4715	227.4715	4.3600e-003	4.1700e-003	228.8232	

## Sandpiper Villa Residential Care - San Diego County, Summer

**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)	1933.51	0.0209	0.1782	0.0758	1.1400e-003		0.0144	0.0144		0.0144	0.0144	227.4715	227.4715	4.3600e-003	4.1700e-003	228.8232	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
<b>Total</b>		<b>0.0209</b>	<b>0.1782</b>	<b>0.0758</b>	<b>1.1400e-003</b>		<b>0.0144</b>	<b>0.0144</b>		<b>0.0144</b>	<b>0.0144</b>		<b>227.4715</b>	<b>227.4715</b>	<b>4.3600e-003</b>	<b>4.1700e-003</b>	<b>228.8232</b>

**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)	1.93351	0.0209	0.1782	0.0758	1.1400e-003		0.0144	0.0144		0.0144	0.0144	227.4715	227.4715	4.3600e-003	4.1700e-003	228.8232	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
<b>Total</b>		<b>0.0209</b>	<b>0.1782</b>	<b>0.0758</b>	<b>1.1400e-003</b>		<b>0.0144</b>	<b>0.0144</b>		<b>0.0144</b>	<b>0.0144</b>		<b>227.4715</b>	<b>227.4715</b>	<b>4.3600e-003</b>	<b>4.1700e-003</b>	<b>228.8232</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

## Sandpiper Villa Residential Care - San Diego County, Summer

	ROG	NOx	CO	SO2	Fugitive 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	3.0995	0.0910	7.8694	4.1000e-004			0.0433	0.0433		0.0433	0.0433	0.0000	14.1247	14.1247	0.0138	0.0000	14.4696
Unmitigated	3.0995	0.0910	7.8694	4.1000e-004			0.0433	0.0433		0.0433	0.0433	0.0000	14.1247	14.1247	0.0138	0.0000	14.4696

**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	0.8186						0.0000	0.0000		0.0000	0.0000			0.0000		0.0000	
Consumer Products	2.0409						0.0000	0.0000		0.0000	0.0000			0.0000		0.0000	
Hearth	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000	0.0000			0.0000		0.0000	
Landscaping	0.2400	0.0910	7.8694	4.1000e-004			0.0433	0.0433		0.0433	0.0433		14.1247	14.1247	0.0138		14.4696
<b>Total</b>	<b>3.0995</b>	<b>0.0910</b>	<b>7.8694</b>	<b>4.1000e-004</b>			<b>0.0433</b>	<b>0.0433</b>		<b>0.0433</b>	<b>0.0433</b>	<b>0.0000</b>	<b>14.1247</b>	<b>14.1247</b>	<b>0.0138</b>	<b>0.0000</b>	<b>14.4696</b>

## Sandpiper Villa Residential Care - San Diego County, Summer

**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	0.8186						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Consumer Products	2.0409						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Hearth	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Landscaping	0.2400	0.0910	7.8694	4.1000e-004			0.0433	0.0433		0.0433	0.0433		14.1247	14.1247	0.0138		14.4696
<b>Total</b>	<b>3.0995</b>	<b>0.0910</b>	<b>7.8694</b>	<b>4.1000e-004</b>			<b>0.0433</b>	<b>0.0433</b>		<b>0.0433</b>	<b>0.0433</b>	<b>0.0000</b>	<b>14.1247</b>	<b>14.1247</b>	<b>0.0138</b>	<b>0.0000</b>	<b>14.4696</b>

**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
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**10.0 Stationary Equipment**

## Sandpiper Villa Residential Care - San Diego County, Summer

**Fire Pumps and Emergency Generators**

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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## Sandpiper Villa Residential Care - San Diego County, Winter

**Sandpiper Villa Residential Care**  
**San Diego County, Winter**

**1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Congregate Care (Assisted Living)	95.00	Dwelling Unit	1.50	95,000.00	272
Parking Lot	56.00	Space	0.50	22,400.00	0

**1.2 Other Project Characteristics**

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	600	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

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

## Sandpiper Villa Residential Care - San Diego County, Winter

Project Characteristics - Energy Policy Initiatives Center, 2017

Land Use - Up to 95 rooms and 56 parking spaces

Construction Phase - \* Construction is estimated to take approximately one year

Grading - 7,510 cy of soil export

Demolition - estimate for existing concrete slabs on site

Architectural Coating - SDAPCD Rule 67.0.1 Architectural Coatings

Vehicle Trips - Transportation Impact Study, Chen Ryan, 2019

Woodstoves - No woodstoves or fireplaces

Energy Use -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblConstructionPhase	NumDays	200.00	240.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	PhaseEndDate	5/11/2020	6/9/2020
tblConstructionPhase	PhaseEndDate	4/13/2020	5/12/2020
tblConstructionPhase	PhaseEndDate	6/28/2019	6/3/2019
tblConstructionPhase	PhaseEndDate	7/8/2019	6/11/2019
tblConstructionPhase	PhaseEndDate	4/27/2020	5/26/2020
tblConstructionPhase	PhaseEndDate	7/2/2019	6/5/2019
tblConstructionPhase	PhaseStartDate	4/28/2020	5/27/2020
tblConstructionPhase	PhaseStartDate	7/9/2019	6/12/2019
tblConstructionPhase	PhaseStartDate	7/3/2019	6/6/2019

## Sandpiper Villa Residential Care - San Diego County, Winter

tblConstructionPhase	PhaseStartDate	4/14/2020	5/13/2020
tblConstructionPhase	PhaseStartDate	6/29/2019	6/4/2019
tblFireplaces	NumberGas	52.25	0.00
tblFireplaces	NumberNoFireplace	9.50	0.00
tblFireplaces	NumberWood	33.25	0.00
tblGrading	AcresOfGrading	2.00	3.00
tblGrading	MaterialExported	0.00	7,510.00
tblLandUse	LotAcreage	5.94	1.50
tblProjectCharacteristics	CO2IntensityFactor	720.49	600
tblVehicleTrips	ST_TR	2.20	2.50
tblVehicleTrips	SU_TR	2.44	2.50
tblVehicleTrips	WD_TR	2.74	2.50
tblWoodstoves	NumberCatalytic	4.75	0.00
tblWoodstoves	NumberNoncatalytic	4.75	0.00

**2.0 Emissions Summary**

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Sandpiper Villa Residential Care - San Diego County, Winter

## 2.1 Overall Construction (Maximum Daily Emission)

## Unmitigated Construction

## **Mitigated Construction**

## Sandpiper Villa Residential Care - San Diego County, Winter

**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	3.0995	0.0910	7.8694	4.1000e-004			0.0433	0.0433		0.0433	0.0433	0.0000	14.1247	14.1247	0.0138	0.0000	14.4696
Energy	0.0209	0.1782	0.0758	1.1400e-003			0.0144	0.0144		0.0144	0.0144		227.4715	227.4715	4.3600e-003	4.1700e-003	228.8232
Mobile	0.4413	1.9266	5.2407	0.0167	1.4380	0.0171	1.4551	0.3844	0.0160	0.4004		1,696.8625	1,696.8625	0.0941		1,699.2145	
<b>Total</b>	<b>3.5617</b>	<b>2.1958</b>	<b>13.1859</b>	<b>0.0183</b>	<b>1.4380</b>	<b>0.0747</b>	<b>1.5128</b>	<b>0.3844</b>	<b>0.0737</b>	<b>0.4581</b>	<b>0.0000</b>	<b>1,938.4587</b>	<b>1,938.4587</b>	<b>0.1122</b>	<b>4.1700e-003</b>	<b>1,942.5073</b>	

**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	3.0995	0.0910	7.8694	4.1000e-004			0.0433	0.0433		0.0433	0.0433	0.0000	14.1247	14.1247	0.0138	0.0000	14.4696
Energy	0.0209	0.1782	0.0758	1.1400e-003			0.0144	0.0144		0.0144	0.0144		227.4715	227.4715	4.3600e-003	4.1700e-003	228.8232
Mobile	0.4413	1.9266	5.2407	0.0167	1.4380	0.0171	1.4551	0.3844	0.0160	0.4004		1,696.8625	1,696.8625	0.0941		1,699.2145	
<b>Total</b>	<b>3.5617</b>	<b>2.1958</b>	<b>13.1859</b>	<b>0.0183</b>	<b>1.4380</b>	<b>0.0747</b>	<b>1.5128</b>	<b>0.3844</b>	<b>0.0737</b>	<b>0.4581</b>	<b>0.0000</b>	<b>1,938.4587</b>	<b>1,938.4587</b>	<b>0.1122</b>	<b>4.1700e-003</b>	<b>1,942.5073</b>	

## Sandpiper Villa Residential Care - San Diego County, Winter

	ROG	NOx	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	Demolition	Demolition	6/3/2019	6/3/2019	5	1	
2	Site Preparation	Site Preparation	6/4/2019	6/5/2019	5	2	
3	Grading	Grading	6/6/2019	6/11/2019	5	4	
4	Building Construction	Building Construction	6/12/2019	5/12/2020	5	240	
5	Paving	Paving	5/13/2020	5/26/2020	5	10	
6	Architectural Coating	Architectural Coating	5/27/2020	6/9/2020	5	10	

Acres of Grading (Site Preparation Phase): 3

Acres of Grading (Grading Phase): 3

Acres of Paving: 0.5

Residential Indoor: 192,375; Residential Outdoor: 64,125; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,344 (Architectural Coating – sqft)

#### OffRoad Equipment

## Sandpiper Villa Residential Care - San Diego 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	1	8.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Scrapers	1	8.00	367	0.48
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

## Sandpiper Villa Residential Care - San Diego County, Winter

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
Demolition	5	13.00	0.00	16.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	939.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	78.00	14.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction****3.2 Demolition - 2019****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					3.4666	0.0000	3.4666	0.5250	0.0000	0.5250			0.0000			0.0000
Off-Road	2.2950	22.6751	14.8943	0.0241		1.2863	1.2863		1.2017	1.2017	2,360.719 8	2,360.719 8	0.6011			2,375.747 5
Total	2.2950	22.6751	14.8943	0.0241	3.4666	1.2863	4.7529	0.5250	1.2017	1.7267	2,360.719 8	2,360.719 8	0.6011			2,375.747 5

## Sandpiper Villa Residential Care - San Diego County, Winter

**3.2 Demolition - 2019****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	0.1428	4.8552	1.1118	0.0125	0.2796	0.0186	0.2981	0.0766	0.0178	0.0944	1,361.454 2	1,361.454 2	0.1270			1,364.628 7
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0577	0.0400	0.3801	1.0700e-003	0.1068	7.6000e-004	0.1076	0.0283	7.0000e-004	0.0290	106.1988	106.1988	3.4300e-003			106.2845
<b>Total</b>	<b>0.2005</b>	<b>4.8952</b>	<b>1.4919</b>	<b>0.0136</b>	<b>0.3864</b>	<b>0.0193</b>	<b>0.4057</b>	<b>0.1050</b>	<b>0.0185</b>	<b>0.1234</b>	<b>1,467.652 9</b>	<b>1,467.652 9</b>	<b>0.1304</b>			<b>1,470.913 1</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.4666	0.0000	3.4666	0.5250	0.0000	0.5250			0.0000			0.0000
Off-Road	2.2950	22.6751	14.8943	0.0241		1.2863	1.2863		1.2017	1.2017	0.0000	2,360.719 7	2,360.719 7	0.6011		2,375.747 5
<b>Total</b>	<b>2.2950</b>	<b>22.6751</b>	<b>14.8943</b>	<b>0.0241</b>	<b>3.4666</b>	<b>1.2863</b>	<b>4.7529</b>	<b>0.5250</b>	<b>1.2017</b>	<b>1.7267</b>	<b>0.0000</b>	<b>2,360.719 7</b>	<b>2,360.719 7</b>	<b>0.6011</b>		<b>2,375.747 5</b>

## Sandpiper Villa Residential Care - San Diego County, Winter

**3.2 Demolition - 2019****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	0.1428	4.8552	1.1118	0.0125	0.2796	0.0186	0.2981	0.0766	0.0178	0.0944	1,361.454 2	1,361.454 2	0.1270			1,364.628 7
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0577	0.0400	0.3801	1.0700e-003	0.1068	7.6000e-004	0.1076	0.0283	7.0000e-004	0.0290	106.1988	106.1988	3.4300e-003			106.2845
Total	0.2005	4.8952	1.4919	0.0136	0.3864	0.0193	0.4057	0.1050	0.0185	0.1234	1,467.652 9	1,467.652 9	0.1304			1,470.913 1

**3.3 Site Preparation - 2019****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					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.7557	21.5386	11.9143	0.0245		0.8537	0.8537		0.7854	0.7854	2,426.540 8	2,426.540 8	0.7677			2,445.734 1
Total	1.7557	21.5386	11.9143	0.0245	1.5908	0.8537	2.4445	0.1718	0.7854	0.9572	2,426.540 8	2,426.540 8	0.7677			2,445.734 1

## Sandpiper Villa Residential Care - San Diego County, Winter

**3.3 Site Preparation - 2019****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0355	0.0246	0.2339	6.6000e-004	0.0657	4.7000e-004	0.0662	0.0174	4.3000e-004	0.0179	65.3531	65.3531	2.1100e-003	65.4058			
<b>Total</b>	<b>0.0355</b>	<b>0.0246</b>	<b>0.2339</b>	<b>6.6000e-004</b>	<b>0.0657</b>	<b>4.7000e-004</b>	<b>0.0662</b>	<b>0.0174</b>	<b>4.3000e-004</b>	<b>0.0179</b>		<b>65.3531</b>	<b>65.3531</b>	<b>2.1100e-003</b>		<b>65.4058</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7557	21.5386	11.9143	0.0245		0.8537	0.8537		0.7854	0.7854	0.0000	2,426.5408	2,426.5408	0.7677		2,445.7341
<b>Total</b>	<b>1.7557</b>	<b>21.5386</b>	<b>11.9143</b>	<b>0.0245</b>	<b>1.5908</b>	<b>0.8537</b>	<b>2.4445</b>	<b>0.1718</b>	<b>0.7854</b>	<b>0.9572</b>	<b>0.0000</b>	<b>2,426.5408</b>	<b>2,426.5408</b>	<b>0.7677</b>		<b>2,445.7341</b>

## Sandpiper Villa Residential Care - San Diego County, Winter

**3.3 Site Preparation - 2019****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0355	0.0246	0.2339	6.6000e-004	0.0657	4.7000e-004	0.0662	0.0174	4.3000e-004	0.0179	65.3531	65.3531	2.1100e-003			65.4058
Total	0.0355	0.0246	0.2339	6.6000e-004	0.0657	4.7000e-004	0.0662	0.0174	4.3000e-004	0.0179		65.3531	65.3531	2.1100e-003		65.4058

**3.4 Grading - 2019****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					7.0813	0.0000	7.0813	3.4361	0.0000	3.4361		0.0000				0.0000
Off-Road	2.0287	22.7444	10.1518	0.0206		1.0730	1.0730		0.9871	0.9871		2,041.253 9	2,041.253 9	0.6458		2,057.399 7
Total	2.0287	22.7444	10.1518	0.0206	7.0813	1.0730	8.1543	3.4361	0.9871	4.4232		2,041.253 9	2,041.253 9	0.6458		2,057.399 7

## Sandpiper Villa Residential Care - San Diego County, Winter

**3.4 Grading - 2019****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	2.0951	71.2351	16.3119	0.1831	4.1020	0.2723	4.3743	1.1242	0.2605	1.3847	19,975.08 51	19,975.08 51	1.8631			20,021.66 13
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0444	0.0308	0.2924	8.2000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223	81.6914	81.6914	2.6400e-003			81.7573
<b>Total</b>	<b>2.1395</b>	<b>71.2659</b>	<b>16.6043</b>	<b>0.1840</b>	<b>4.1842</b>	<b>0.2729</b>	<b>4.4571</b>	<b>1.1460</b>	<b>0.2611</b>	<b>1.4071</b>	<b>20,056.77 64</b>	<b>20,056.77 64</b>	<b>1.8657</b>			<b>20,103.41 86</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0813	0.0000	7.0813	3.4361	0.0000	3.4361			0.0000			0.0000
Off-Road	2.0287	22.7444	10.1518	0.0206		1.0730	1.0730		0.9871	0.9871	0.0000	2,041.253 9	2,041.253 9	0.6458		2,057.399 7
<b>Total</b>	<b>2.0287</b>	<b>22.7444</b>	<b>10.1518</b>	<b>0.0206</b>	<b>7.0813</b>	<b>1.0730</b>	<b>8.1543</b>	<b>3.4361</b>	<b>0.9871</b>	<b>4.4232</b>	<b>0.0000</b>	<b>2,041.253 9</b>	<b>2,041.253 9</b>	<b>0.6458</b>		<b>2,057.399 7</b>

## Sandpiper Villa Residential Care - San Diego County, Winter

**3.4 Grading - 2019****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	2.0951	71.2351	16.3119	0.1831	4.1020	0.2723	4.3743	1.1242	0.2605	1.3847	19,975.08 51	19,975.08 51	1.8631			20,021.66 13	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0444	0.0308	0.2924	8.2000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223	81.6914	81.6914	2.6400e-003			81.7573	
Total	2.1395	71.2659	16.6043	0.1840	4.1842	0.2729	4.4571	1.1460	0.2611	1.4071	20,056.77 64	20,056.77 64	1.8657			20,103.41 86	

**3.5 Building Construction - 2019****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	2.5581	18.9103	15.2545	0.0250			1.0901	1.0901		1.0449	1.0449	2,312.145 4	2,312.145 4	0.4810			2,324.170 5
Total	2.5581	18.9103	15.2545	0.0250			1.0901	1.0901		1.0449	1.0449	2,312.145 4	2,312.145 4	0.4810			2,324.170 5

## Sandpiper Villa Residential Care - San Diego County, Winter

**3.5 Building Construction - 2019****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0672	1.7372	0.4969	3.7700e-003	0.0948	0.0123	0.1071	0.0273	0.0118	0.0390	403.9004	403.9004	0.0340	404.7513		
Worker	0.3464	0.2400	2.2807	6.4000e-003	0.6408	4.5700e-003	0.6453	0.1700	4.2100e-003	0.1742	637.1927	637.1927	0.0206	637.7067		
<b>Total</b>	<b>0.4136</b>	<b>1.9773</b>	<b>2.7775</b>	<b>0.0102</b>	<b>0.7355</b>	<b>0.0169</b>	<b>0.7524</b>	<b>0.1972</b>	<b>0.0160</b>	<b>0.2132</b>	<b>1,041.0931</b>	<b>1,041.0931</b>	<b>0.0546</b>		<b>1,042.4580</b>	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5581	18.9103	15.2545	0.0250		1.0901	1.0901		1.0449	1.0449	0.0000	2,312.1454	2,312.1454	0.4810		2,324.1705
<b>Total</b>	<b>2.5581</b>	<b>18.9103</b>	<b>15.2545</b>	<b>0.0250</b>		<b>1.0901</b>	<b>1.0901</b>		<b>1.0449</b>	<b>1.0449</b>	<b>0.0000</b>	<b>2,312.1454</b>	<b>2,312.1454</b>	<b>0.4810</b>		<b>2,324.1705</b>

## Sandpiper Villa Residential Care - San Diego County, Winter

**3.5 Building Construction - 2019****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0672	1.7372	0.4969	3.7700e-003	0.0948	0.0123	0.1071	0.0273	0.0118	0.0390	403.9004	403.9004	0.0340	404.7513			
Worker	0.3464	0.2400	2.2807	6.4000e-003	0.6408	4.5700e-003	0.6453	0.1700	4.2100e-003	0.1742	637.1927	637.1927	0.0206	637.7067			
Total	0.4136	1.9773	2.7775	0.0102	0.7355	0.0169	0.7524	0.1972	0.0160	0.2132	1,041.0931	1,041.0931	0.0546		1,042.4580		

**3.5 Building Construction - 2020****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	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089	2,288.8877	2,288.8877	0.4646		2,300.5014		
Total	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089	2,288.8877	2,288.8877	0.4646		2,300.5014		

## Sandpiper Villa Residential Care - San Diego County, Winter

**3.5 Building Construction - 2020****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0548	1.5773	0.4463	3.7400e-003	0.0948	7.8700e-003	0.1026	0.0273	7.5300e-003	0.0348	401.0471	401.0471	0.0323			401.8539
Worker	0.3242	0.2165	2.0845	6.1900e-003	0.6408	4.5000e-003	0.6453	0.1700	4.1400e-003	0.1741	617.0829	617.0829	0.0186			617.5474
<b>Total</b>	<b>0.3790</b>	<b>1.7939</b>	<b>2.5309</b>	<b>9.9300e-003</b>	<b>0.7355</b>	<b>0.0124</b>	<b>0.7479</b>	<b>0.1972</b>	<b>0.0117</b>	<b>0.2089</b>	<b>1,018.1300</b>	<b>1,018.1300</b>	<b>0.0509</b>			<b>1,019.4013</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089	0.0000	2,288.8877	2,288.8877	0.4646		2,300.5014
<b>Total</b>	<b>2.2879</b>	<b>17.4336</b>	<b>14.8972</b>	<b>0.0250</b>		<b>0.9482</b>	<b>0.9482</b>		<b>0.9089</b>	<b>0.9089</b>	<b>0.0000</b>	<b>2,288.8877</b>	<b>2,288.8877</b>	<b>0.4646</b>		<b>2,300.5014</b>

## Sandpiper Villa Residential Care - San Diego County, Winter

**3.5 Building Construction - 2020****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0548	1.5773	0.4463	3.7400e-003	0.0948	7.8700e-003	0.1026	0.0273	7.5300e-003	0.0348	401.0471	401.0471	0.0323			401.8539	
Worker	0.3242	0.2165	2.0845	6.1900e-003	0.6408	4.5000e-003	0.6453	0.1700	4.1400e-003	0.1741	617.0829	617.0829	0.0186			617.5474	
Total	0.3790	1.7939	2.5309	9.9300e-003	0.7355	0.0124	0.7479	0.1972	0.0117	0.2089	1,018.1300	1,018.1300	0.0509			1,019.4013	

**3.6 Paving - 2020****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	1.1547	11.5873	11.8076	0.0178		0.6565	0.6565		0.6051	0.6051	1,709.2180	1,709.2180	0.5417			1,722.7605	
Paving	0.1310					0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	
Total	1.2857	11.5873	11.8076	0.0178		0.6565	0.6565		0.6051	0.6051		1,709.2180	1,709.2180	0.5417			1,722.7605

## Sandpiper Villa Residential Care - San Diego County, Winter

**3.6 Paving - 2020****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0623	0.0416	0.4009	1.1900e-003	0.1232	8.6000e-004	0.1241	0.0327	8.0000e-004	0.0335	118.6698	118.6698	3.5700e-003	118.7591		
<b>Total</b>	<b>0.0623</b>	<b>0.0416</b>	<b>0.4009</b>	<b>1.1900e-003</b>	<b>0.1232</b>	<b>8.6000e-004</b>	<b>0.1241</b>	<b>0.0327</b>	<b>8.0000e-004</b>	<b>0.0335</b>		<b>118.6698</b>	<b>118.6698</b>	<b>3.5700e-003</b>		<b>118.7591</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1547	11.5873	11.8076	0.0178		0.6565	0.6565		0.6051	0.6051	0.0000	1,709.2180	1,709.2180	0.5417		1,722.7605
Paving	0.1310					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.2857</b>	<b>11.5873</b>	<b>11.8076</b>	<b>0.0178</b>		<b>0.6565</b>	<b>0.6565</b>		<b>0.6051</b>	<b>0.6051</b>	<b>0.0000</b>	<b>1,709.2180</b>	<b>1,709.2180</b>	<b>0.5417</b>		<b>1,722.7605</b>

## Sandpiper Villa Residential Care - San Diego County, Winter

**3.6 Paving - 2020****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0623	0.0416	0.4009	1.1900e-003	0.1232	8.6000e-004	0.1241	0.0327	8.0000e-004	0.0335	118.6698	118.6698	3.5700e-003	118.7591		
Total	0.0623	0.0416	0.4009	1.1900e-003	0.1232	8.6000e-004	0.1241	0.0327	8.0000e-004	0.0335		118.6698	118.6698	3.5700e-003		118.7591

**3.7 Architectural Coating - 2020****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	59.7554						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	59.9975	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

## Sandpiper Villa Residential Care - San Diego County, Winter

**3.7 Architectural Coating - 2020****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0665	0.0444	0.4276	1.2700e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357	126.5811	126.5811	3.8100e-003	126.6764		
<b>Total</b>	<b>0.0665</b>	<b>0.0444</b>	<b>0.4276</b>	<b>1.2700e-003</b>	<b>0.1314</b>	<b>9.2000e-004</b>	<b>0.1324</b>	<b>0.0349</b>	<b>8.5000e-004</b>	<b>0.0357</b>		<b>126.5811</b>	<b>126.5811</b>	<b>3.8100e-003</b>		<b>126.6764</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	59.7554						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>59.9975</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

## Sandpiper Villa Residential Care - San Diego County, Winter

**3.7 Architectural Coating - 2020****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0665	0.0444	0.4276	1.2700e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357	126.5811	126.5811	3.8100e-003			126.6764
Total	<b>0.0665</b>	<b>0.0444</b>	<b>0.4276</b>	<b>1.2700e-003</b>	<b>0.1314</b>	<b>9.2000e-004</b>	<b>0.1324</b>	<b>0.0349</b>	<b>8.5000e-004</b>	<b>0.0357</b>		<b>126.5811</b>	<b>126.5811</b>	<b>3.8100e-003</b>		<b>126.6764</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Sandpiper Villa Residential Care - San Diego County, Winter

	ROG	NOx	CO	SO2	Fugitive 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	0.4413	1.9266	5.2407	0.0167	1.4380	0.0171	1.4551	0.3844	0.0160	0.4004	1,696.862 5	1,696.862 5	0.0941		1,699.214 5		
Unmitigated	0.4413	1.9266	5.2407	0.0167	1.4380	0.0171	1.4551	0.3844	0.0160	0.4004	1,696.862 5	1,696.862 5	0.0941		1,699.214 5		

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
Congregate Care (Assisted Living)	237.50	237.50	237.50		678,135		678,135
Parking Lot	0.00	0.00	0.00				
Total	237.50	237.50	237.50		678,135		678,135

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Congregate Care (Assisted)	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Parking Lot	9.50	7.30	7.30	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
Congregate Care (Assisted Living)	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271
Parking Lot	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

## Sandpiper Villa Residential Care - San Diego County, Winter

## 5.0 Energy Detail

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Historical Energy Use: N

### 5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0209	0.1782	0.0758	1.1400e-003			0.0144	0.0144		0.0144	227.4715	227.4715	4.3600e-003	4.1700e-003	228.8232	
NaturalGas Unmitigated	0.0209	0.1782	0.0758	1.1400e-003			0.0144	0.0144		0.0144	227.4715	227.4715	4.3600e-003	4.1700e-003	228.8232	

## Sandpiper Villa Residential Care - San Diego County, Winter

**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)	1933.51	0.0209	0.1782	0.0758	1.1400e-003		0.0144	0.0144		0.0144	0.0144	227.4715	227.4715	4.3600e-003	4.1700e-003	228.8232	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
<b>Total</b>		<b>0.0209</b>	<b>0.1782</b>	<b>0.0758</b>	<b>1.1400e-003</b>		<b>0.0144</b>	<b>0.0144</b>		<b>0.0144</b>	<b>0.0144</b>		<b>227.4715</b>	<b>227.4715</b>	<b>4.3600e-003</b>	<b>4.1700e-003</b>	<b>228.8232</b>

**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)	1.93351	0.0209	0.1782	0.0758	1.1400e-003		0.0144	0.0144		0.0144	0.0144	227.4715	227.4715	4.3600e-003	4.1700e-003	228.8232	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
<b>Total</b>		<b>0.0209</b>	<b>0.1782</b>	<b>0.0758</b>	<b>1.1400e-003</b>		<b>0.0144</b>	<b>0.0144</b>		<b>0.0144</b>	<b>0.0144</b>		<b>227.4715</b>	<b>227.4715</b>	<b>4.3600e-003</b>	<b>4.1700e-003</b>	<b>228.8232</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

## Sandpiper Villa Residential Care - San Diego County, Winter

	ROG	NOx	CO	SO2	Fugitive 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	3.0995	0.0910	7.8694	4.1000e-004			0.0433	0.0433		0.0433	0.0433	0.0000	14.1247	14.1247	0.0138	0.0000	14.4696
Unmitigated	3.0995	0.0910	7.8694	4.1000e-004			0.0433	0.0433		0.0433	0.0433	0.0000	14.1247	14.1247	0.0138	0.0000	14.4696

**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	0.8186						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Consumer Products	2.0409						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Hearth	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Landscaping	0.2400	0.0910	7.8694	4.1000e-004			0.0433	0.0433		0.0433	0.0433		14.1247	14.1247	0.0138		14.4696
<b>Total</b>	<b>3.0995</b>	<b>0.0910</b>	<b>7.8694</b>	<b>4.1000e-004</b>			<b>0.0433</b>	<b>0.0433</b>		<b>0.0433</b>	<b>0.0433</b>	<b>0.0000</b>	<b>14.1247</b>	<b>14.1247</b>	<b>0.0138</b>	<b>0.0000</b>	<b>14.4696</b>

## Sandpiper Villa Residential Care - San Diego County, Winter

**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	0.8186					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.0409					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2400	0.0910	7.8694	4.1000e-004		0.0433	0.0433		0.0433	0.0433	14.1247	14.1247	0.0138			14.4696
<b>Total</b>	<b>3.0995</b>	<b>0.0910</b>	<b>7.8694</b>	<b>4.1000e-004</b>		<b>0.0433</b>	<b>0.0433</b>		<b>0.0433</b>	<b>0.0433</b>	<b>0.0000</b>	<b>14.1247</b>	<b>14.1247</b>	<b>0.0138</b>	<b>0.0000</b>	<b>14.4696</b>

**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
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**10.0 Stationary Equipment**

## Sandpiper Villa Residential Care - San Diego County, Winter

**Fire Pumps and Emergency Generators**

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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