

APPENDIX A
AIR QUALITY/GREENHOUSE GAS



MEMORANDUM

To: Dave Weisman, Avellana Properties Incorporated
From: Ace Malisos
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Kimley-Horn and Associates, Inc.
Date: September 12, 2022
Subject: Avellana Senior Wellness Community, San Bernardino County – Air Quality and Greenhouse Gas Emissions

Purpose

The purpose of this memorandum is to identify the air quality and greenhouse gas (GHG) emissions associated with construction and operations of the proposed Senior Wellness Community Project (project), located in unincorporated San Bernardino County, California.

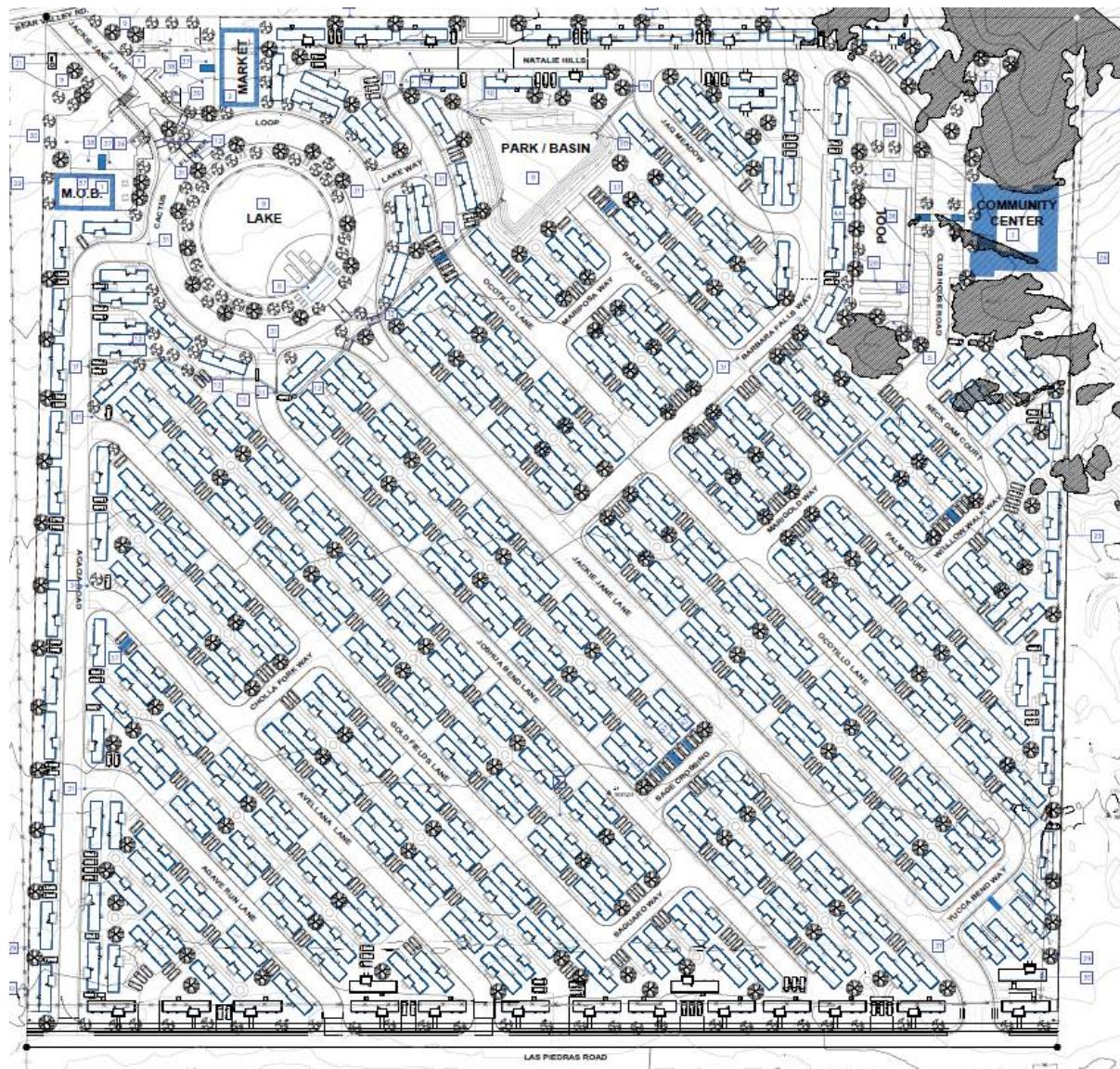
Project Description

The project proposes to construct a residential senior community park with a clubhouse, convenience store, utility parcel, and on-site medical clinic and accommodates 399 units of mobile homes. The target residents would be in the age range of 62 to 78. The project site is approximately 45 acre (APN: 0436-015-13) and each mobile home unit would be 940 square feet with two bedrooms and two bathrooms. The project would also install its own water/wastewater treatment facility and provides 100 percent of the community's water demand. Wastewater would be treated and goes into a pond to recharge the aquifer or be used for landscaping and would not leave the property. There would be no natural gas usage on the project site. The utility parcel land (APN: 0436-015-35) would be located south of the project site and occupies approximately 4.72 acres. The project would build a 2-megawatt (MW) solar power station onsite to supply 100 percent of the required electricity for the community. All of the project's electricity demand would be served by Avellana Power Rural Electrical Cooperative, which would provide renewable solar power to the site.

The home units would be manufactured and delivered ready to set down and the only on-site construction would be related to clubhouse (6,000 square feet [SF]), roads, and community amenities. The project site is empty, and no demolition would be required. The construction time frame is anticipated to be approximately 10 months. The property is flat and no soil import/export is required.

The project site is located south of the merge-point of Bear Valley Road and California State Route 18 highway (SR-18). The community entrance is about 2,500 feet west of SR-18 on Bear valley Road. The project site plan is provided on **Figure 1: Site Plan**.

Figure 1: Site Plan



Air Quality Impacts

MDAQMD Mass Emission Thresholds

MDAQMD's significance criteria are used to make the above determinations. According to the MDAQMD, an air quality impact is considered significant if a project would violate any NAAQS or CAAQS, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. The MDAQMD has established thresholds of significance for air quality during construction and operational activities of land use development projects, as shown in **Table 1: Mojave Desert Air Quality Management District Emissions Thresholds**. These mass emissions thresholds are pollutant limits described in pounds per day and tons per year. The project emissions are quantified using CalEEMod software and compared to the MDAQMD's thresholds.

Table 1: Mojave Desert Air Quality Management District Emissions Thresholds		
Pollutants	Annual Thresholds (tons)	Daily Thresholds (pounds)
Greenhouse Gases (CO ₂ e) ¹	100,000	548,000
Carbon Monoxide (CO)	100	548
Nitrogen Oxides (NO _x)	25	137
Volatile Organic Compounds (VOC)	25	137
Sulfur Oxides (SO _x)	25	137
Coarse Particulates (PM ₁₀)	15	82
Fine Particulates (PM _{2.5})	12	65

Note:

1. The project site is located in an unincorporated section of the San Bernardino County and therefore the threshold of 3,000 MTCO₂e/year has been considered for this analysis in accordance with San Bernardino County GHG Emissions Reduction Plan.

Source: Mojave Desert Air Quality Management District, MDAQMD CEQA and Federal Conformity Guidelines, April 2016.

A significant project impact must incorporate mitigation sufficient to reduce its impact to a level that is not significant. A project that cannot be mitigated to a level that is not significant must incorporate all feasible mitigation. The emission thresholds are given as a daily value and an annual value, so that multi-phased project (such as a project with a construction phase and a separate operational phase) with phases shorter than one year can be compared to the daily value.

Construction Emissions

Construction associated with the proposed project would generate short-term emissions of criteria air pollutants. The criteria pollutants of primary concern within the project area include ozone-precursor pollutants (i.e., ROG and NO_x), PM₁₀, and PM_{2.5}. Construction-generated emissions are short term and of temporary duration, lasting only as long as construction activities occur, but would be

considered a significant air quality impact if the volume of pollutants generated exceeds the MDAQMD's thresholds of significance.

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

The duration of construction activities for the project is estimated to be approximately 10 months, beginning in June 2021. Construction is conservatively assumed to occur in 2021, as delaying the start of construction would only likely reduce emissions as emission control technology will improve in the future.¹ The project would construct a clubhouse, roads, and community amenities for accommodating the mobile home units. Construction-generated emissions associated with the proposed project were calculated using the CARB-approved California Emissions Estimator Model version 2022 (CALEEMod), which is designed to model emissions for land use development projects, based on typical construction requirements. See Appendix A (Air Quality and GHG Data) for more information regarding the construction assumptions used in this analysis. Predicted maximum daily construction-generated emissions for the proposed project are identified in **Table 2: Project Construction Emissions**.

Table 2 shows that construction pollutant emissions would remain below their respective thresholds with implementation of required MDAQMD Rule 403.2. The project would also be required to comply with MDAQMD Rules 402 and 1113, which prohibit nuisances and limit VOC content in paints, respectively. Compliance with MDAQMD rules 402 and 1113 would further reduce specific construction-related emissions. As shown above, all criteria pollutant emissions would remain below their respective thresholds and impacts would be less than significant.

¹ Emissions in future years (i.e., due to a later construction start date or operational opening year) would be lower due to phased-in emissions standards, inspection and maintenance requirements, and fleet turnover). Specifically, project construction was modeled to start in 2021 but would commence at a later date. As such, construction impacts would be less than those analyzed due to the use of more energy-efficient and cleaner burning construction vehicle fleet mix, pursuant to state regulations that require vehicle fleet operators to phase-in less polluting heavy-duty equipment. As a result, Project-related construction air quality impacts would be lower than the impacts disclosed herein. For emissions modeling purposes, conservatively analyzing the emissions using an earlier construction start date (i.e., 2021), provides for a worst-case analysis and full disclosure of potential air quality impacts, as required by CEQA.

Table 2: Project Construction Emissions						
Construction Year	Emissions (pounds per day)¹					
	ROG	NO_x	CO	SO₂	PM₁₀	PM_{2.5}
2021	4.51	46.30	60.1	0.06	10.00	5.97
2022	85.2	21.00	49.01	0.04	7.39	2.26
MDAQMD Threshold	n/a	137	548	137	82	65
MDAQMD Threshold Exceeded?	n/a	No	No	No	No	No

Notes:

1. MDAQMD Rule 403 Fugitive Dust applied. The Rule 403 reduction/credits include the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; replace ground cover of area disturbed; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the South Coast Air Quality Management District (SCAQMD) CEQA Handbook (Tables XI-A through XI-E) were applied. No mitigation was applied to construction equipment. Refer to Appendix A for Model Data Outputs.

Source: CalEEMod version 2020.4.0. Refer to Appendix A for model outputs.

Operational Emissions

Operational emissions are typically associated with mobile sources (i.e., motor vehicle use) and area sources (such as the use of landscape maintenance equipment, hearths, consumer products, and architectural coatings). Energy source emissions would be generated from electricity and natural gas (non-hearth) usage. **Table 3: Operational Emissions** summarizes the operational emissions attributable to the proposed project. As shown in **Table 3**, the project's emissions would not exceed MDAQMD thresholds. Therefore, regional operations emissions would result in a less than significant long-term regional air quality impact.

Table 3: Operational Emissions						
Source	Emissions (pounds per day)¹					
	ROG	NO_x	CO	SO₂	PM₁₀	PM_{2.5}
Project Emissions						
Area ²	35.40	0.32	32.3	<0.01	0.02	0.03
Energy ³	0	0	0	0	0	0
Mobile	8.92	10.10	62.90	0.16	4.91	0.97
Total	44.32	10.42	95.2	0.16	4.93	1
MDAQMD Threshold	n/a	137	548	137	82	65
MDAQMD Threshold Exceeded?	n/a	No	No	No	No	No

Notes:

1. Emissions were calculated using the California Emissions Estimator Model version 2022 (CalEEMod), as recommended by the County. Worst-case seasonal maximum daily emissions are reported.
2. The proposed mobile home units would not include any kind of fireplaces.
3. The project would generate and supply 100 percent of the required energy through the proposed solar power station on-site.

Carbon Monoxide Hotspots

An analysis of CO “hot spots” is needed to determine whether the change in the level of service (LOS) of an intersection from the proposed project would have the potential to result in exceedances of the CAAQS or NAAQS. It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when vehicles are idling at intersections. Vehicle emissions standards have become increasingly stringent in the last 20 years. Currently, the CO standard in California is a maximum of 3.4 grams per mile for passenger cars (requirements for certain vehicles are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations have steadily declined.

Accordingly, with the steadily decreasing CO emissions from vehicles, even very busy intersections do not result in exceedances of the CO standard. MDAQMD has not established CO hotspot methodology. However, according to the Traffic Impact Analysis (Avellana Senior Living Mobile Homes) prepared by TJW Engineering Inc. (January 2022), the project would generate a total of 1,385 daily vehicle trips, which would not cause an intersection to operate at an unacceptable LOS.

Additionally, the 2003 *Air Quality Management Plan* is the most recent AQMP that addresses CO concentrations. As part of the SCAQMD CO Hotspot analysis, the Wilshire Boulevard/Veteran Avenue intersection, one of the most congested intersections in Southern California with an average daily traffic (ADT) volume of approximately 100,000 vehicles per day, was modeled for CO concentrations. The proposed project considered herein would not produce the volume of traffic required to generate a CO hot spot in the context of SCAQMD’s 2003 CO hot-spot analysis. As the CO hotspots were not experienced at the Wilshire Boulevard/Veteran Avenue intersection even as it accommodates 100,000 vehicles daily, it can be reasonably inferred that CO hotspots would not be experienced at any vicinity intersections from 1,385 total daily vehicle trips² attributable to the project. Therefore, impacts would be less than significant in this regard.

Greenhouse Gas Emissions

The project would include direct and indirect GHG emissions from project construction and operations. Construction is considered a direct source since these emissions occur at the site. Direct operational-related GHG emissions for the proposed project would include emissions from area and mobile sources, while indirect emissions are from solid waste. The project would not include emissions from energy generation or water supply and treatment as it would supply 100 percent of the required energy through the proposed on-site solar power station.

² Based on the Scope for Traffic Study (Avellana Senior Living Mobile Homes) prepared by TJW Engineering Inc., January 2022.

Construction GHG Emissions

Construction of the project would result in direct emissions of CO₂, N₂O, and CH₄ from construction equipment and the transport of materials and construction workers to and from the project site. Construction GHG emissions are typically summed and amortized over the lifetime of the project (assumed to be 30 years), then added to the operational emissions.³ Total GHG emissions generated during all phases of construction were combined and are presented in **Table 4: Construction Greenhouse Gas Emissions**. The CalEEMod outputs are contained within Appendix A (Air Quality and GHG Data). As shown in **Table 4**, the project construction would result in 991 MTCO₂e (approximately 33 MTCO₂e/year when amortized over 30 years).

Table 4: Construction Greenhouse Gas Emissions	
Construction	MTCO₂e per Year
2021 Construction	689
2022 Construction	302
<i>Total Construction Emissions</i>	991
30-Year Amortized Construction	33

Source: CalEEMod version 2022 Refer to Appendix A for model data outputs.

Operational GHG Emissions

Operational or long-term emissions occur over the life of the proposed project. For this project, GHG emissions would result from direct emissions such as project generated vehicular traffic and operation of any on-site landscaping equipment. Operational GHG emissions would also result from indirect sources, such as the emissions associated with solid waste generated from the project site and any fugitive refrigerants from air conditioning or refrigerators. **Table 5: Total Project Greenhouse Gas Emissions** summarizes the total GHG emissions associated with the proposed project. As shown, the project would generate approximately 2,847 MTCO₂e/year. The project would not result in an increase in GHG emissions that exceed the County's GHG Emissions Reduction Plan (GHG Plan) review standard of 3,000 MTCO₂e/yr. Projects that do not exceed 3,000 MTCO₂e per year are considered to be consistent with the County's GHG Plan and determined to have a less than significant individual and cumulative impact for GHG emissions. Therefore, project-related GHG emissions would be less than significant.

³ The project lifetime is based on the standard 30-year assumption of the South Coast Air Quality Management District (South Coast Air Quality Management District, *Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #13*, August 26, 2009).

Table 5: Total Project Greenhouse Gas Emissions

Emissions Source	MTCO ₂ e per Year
Construction Amortized over 30 Years	33
Area Source	8
Energy ¹	0
Mobile	2,528
Waste	148
Water & Wastewater ¹	0
Refrigeration	130
Total Project Emissions²	2,847
San Bernardino GHG Reduction Plan Threshold	3,000
Threshold Exceeded?	No

Notes:

1. The project would supply 100 percent of its required energy through an on-site solar power station. Furthermore, 100 percent of the water/wastewater would be treated onsite and would not leave the property.
2. Totals may be slightly off due to rounding.

Source: CalEEMod version 2022 Refer to Appendix A for model data outputs.

Conclusion

Project implementation would result in less than significant short- and long-term air quality and GHG impacts. No mitigation measures would be required.

Appendix A

Air Quality and GHG Data

Senior Wellness Community in Apple Valley - San Bernardino County Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

2.3. Construction Emissions by Year, Mitigated

2.4. Operations Emissions Compared Against Thresholds

2.5. Operations Emissions by Sector, Unmitigated

2.6. Operations Emissions by Sector, Mitigated

3. Construction Emissions Details

3.1. Site Preparation (2021) - Unmitigated

3.2. Site Preparation (2021) - Mitigated

3.3. Grading (2021) - Unmitigated

3.4. Grading (2021) - Mitigated

3.5. Building Construction (2021) - Unmitigated

3.6. Building Construction (2021) - Mitigated

3.7. Building Construction (2022) - Unmitigated

3.8. Building Construction (2022) - Mitigated

3.9. Paving (2022) - Unmitigated

3.10. Paving (2022) - Mitigated

3.11. Architectural Coating (2022) - Unmitigated

3.12. Architectural Coating (2022) - Mitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.1.2. Mitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.2. Electricity Emissions By Land Use - Mitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.2.4. Natural Gas Emissions By Land Use - Mitigated

4.3. Area Emissions by Source

4.3.2. Unmitigated

4.3.1. Mitigated

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

4.4.1. Mitigated

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

4.5.1. Mitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.6.2. Mitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.7.2. Mitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.8.2. Mitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.9.2. Mitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.2.2. Mitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.3.2. Mitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.9.2. Mitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.10.4. Landscape Equipment - Mitigated

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.11.2. Mitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.12.2. Mitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.13.2. Mitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.14.2. Mitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Senior Wellness Community in Apple Valley - San Bernardino County
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	5.00
Precipitation (days)	12.8
Location	34.47058705117955, -117.12781599116164
County	San Bernardino-Mojave Desert
City	—
Air District	Mojave Desert AQMD
Air Basin	Mojave Desert
TAZ	5114
EDFZ	10
Electric Utility	User Defined
Gas Utility	User Defined

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Mobile Home Park	399	Dwelling Unit	26.2	1,142,406	0.00	—	798	—
General Heavy Industry	206	1000sqft	4.72	205,600	0.00	—	—	—

Convenience Market (24 hour)	3.50	1000sqft	3.38	3,500	0.00	—	—	—
Medical Office Building	5.00	1000sqft	0.12	5,000	0.00	—	—	—
Health Club	11.7	1000sqft	0.27	11,700	0.00	—	—	—
Other Asphalt Surfaces	449	1000sqft	10.3	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-10-C	Water Unpaved Construction Roads
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads
Construction	C-12	Sweep Paved Roads
Transportation	T-4	Integrate Affordable and Below Market Rate Housing

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.36	4.51	46.3	60.1	0.06	2.14	7.89	10.0	1.97	3.99	5.97	—	11,103	11,103	0.37	0.57	35.7	11,317
Mit.	5.36	4.51	46.3	60.1	0.06	2.14	7.89	10.0	1.97	3.99	5.97	—	11,103	11,103	0.37	0.57	35.7	11,317
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Senior Wellness Community in Apple Valley - San Bernardino County Detailed Report, 9/7/2022

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.95	85.2	22.0	49.1	0.04	0.84	6.66	7.39	0.77	1.59	2.26	—	11,465	11,465	0.42	0.61	1.00	11,658		
Mit.	4.95	85.2	22.0	49.1	0.04	0.84	6.66	7.39	0.77	1.59	2.26	—	11,465	11,465	0.42	0.61	1.00	11,658		
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.99	14.9	11.4	19.6	0.02	0.45	2.27	2.73	0.42	0.62	1.04	—	4,096	4,096	0.15	0.20	5.20	4,163		
Mit.	1.99	14.9	11.4	19.6	0.02	0.45	2.27	2.73	0.42	0.62	1.04	—	4,096	4,096	0.15	0.20	5.20	4,163		
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.36	2.72	2.08	3.57	< 0.005	0.08	0.41	0.50	0.08	0.11	0.19	—	678	678	0.03	0.03	0.86	689		
Mit.	0.36	2.72	2.08	3.57	< 0.005	0.08	0.41	0.50	0.08	0.11	0.19	—	678	678	0.03	0.03	0.86	689		
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e	
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
2021	5.36	4.51	46.3	60.1	0.06	2.14	7.89	10.0	1.97	3.99	5.97	—	11,103	11,103	0.37	0.57	35.7	11,317	
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
2021	4.58	4.03	22.0	45.8	0.04	0.84	5.67	6.50	0.77	1.36	2.13	—	10,400	10,400	0.39	0.57	0.92	10,580	

2022	4.95	85.2	21.0	49.1	0.04	0.73	6.66	7.39	0.67	1.59	2.26	—	11,465	11,465	0.42	0.61	1.00	11,658
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
2021	1.99	1.74	11.4	19.6	0.02	0.45	2.27	2.73	0.42	0.62	1.04	—	4,096	4,096	0.15	0.20	5.20	4,163
2022	0.78	14.9	3.39	8.30	0.01	0.12	1.00	1.12	0.11	0.24	0.35	—	1,792	1,792	0.06	0.09	2.53	1,823
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
2021	0.36	0.32	2.08	3.57	< 0.005	0.08	0.41	0.50	0.08	0.11	0.19	—	678	678	0.03	0.03	0.86	689
2022	0.14	2.72	0.62	1.52	< 0.005	0.02	0.18	0.21	0.02	0.04	0.06	—	297	297	0.01	0.02	0.42	302

2.3. Construction Emissions by Year, Mitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
2021	5.36	4.51	46.3	60.1	0.06	2.14	7.89	10.0	1.97	3.99	5.97	—	11,103	11,103	0.37	0.57	35.7	11,317
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
2021	4.58	4.03	22.0	45.8	0.04	0.84	5.67	6.50	0.77	1.36	2.13	—	10,400	10,400	0.39	0.57	0.92	10,580
2022	4.95	85.2	21.0	49.1	0.04	0.73	6.66	7.39	0.67	1.59	2.26	—	11,465	11,465	0.42	0.61	1.00	11,658
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
2021	1.99	1.74	11.4	19.6	0.02	0.45	2.27	2.73	0.42	0.62	1.04	—	4,096	4,096	0.15	0.20	5.20	4,163
2022	0.78	14.9	3.39	8.30	0.01	0.12	1.00	1.12	0.11	0.24	0.35	—	1,792	1,792	0.06	0.09	2.53	1,823
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
2021	0.36	0.32	2.08	3.57	< 0.005	0.08	0.41	0.50	0.08	0.11	0.19	—	678	678	0.03	0.03	0.86	689
2022	0.14	2.72	0.62	1.52	< 0.005	0.02	0.18	0.21	0.02	0.04	0.06	—	297	297	0.01	0.02	0.42	302

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	13.7	44.3	9.68	115	0.16	0.16	4.77	4.93	0.16	0.84	1.00	256	16,211	16,467	26.2	0.71	860	18,195
Mit.	13.7	44.3	9.68	115	0.16	0.16	4.77	4.93	0.16	0.84	1.00	256	16,211	16,467	26.2	0.71	860	18,195
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.41	39.3	10.1	62.9	0.14	0.14	4.77	4.91	0.13	0.84	0.97	256	14,666	14,922	26.3	0.74	789	16,589
Mit.	8.41	39.3	10.1	62.9	0.14	0.14	4.77	4.91	0.13	0.84	0.97	256	14,666	14,922	26.3	0.74	789	16,589
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.5	41.3	10.6	84.4	0.15	0.15	4.77	4.92	0.14	0.84	0.98	256	15,046	15,302	26.3	0.75	819	17,002
Mit.	10.5	41.3	10.6	84.4	0.15	0.15	4.77	4.92	0.14	0.84	0.98	256	15,046	15,302	26.3	0.75	819	17,002
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.92	7.53	1.93	15.4	0.03	0.03	0.87	0.90	0.03	0.15	0.18	42.4	2,491	2,533	4.35	0.12	136	2,815
Mit.	1.92	7.53	1.93	15.4	0.03	0.03	0.87	0.90	0.03	0.15	0.18	42.4	2,491	2,533	4.35	0.12	136	2,815
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Mobile	9.65	8.92	9.37	82.3	0.16	0.14	4.77	4.91	0.13	0.84	0.97	—	16,110	16,110	0.63	0.71	72.3	16,410
Area	4.03	35.4	0.32	32.3	< 0.005	0.02	—	0.02	0.03	—	0.03	0.00	101	101	< 0.005	< 0.005	—	101
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	256	0.00	256	25.6	0.00	—	896
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	788
Total	13.7	44.3	9.68	115	0.16	0.16	4.77	4.93	0.16	0.84	1.00	256	16,211	16,467	26.2	0.71	860	18,195
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.41	7.69	10.1	62.9	0.14	0.14	4.77	4.91	0.13	0.84	0.97	—	14,666	14,666	0.65	0.74	1.87	14,905
Area	0.00	31.6	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	256	0.00	256	25.6	0.00	—	896
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	788
Total	8.41	39.3	10.1	62.9	0.14	0.14	4.77	4.91	0.13	0.84	0.97	256	14,666	14,922	26.3	0.74	789	16,589
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.51	7.79	10.4	68.5	0.15	0.14	4.77	4.91	0.13	0.84	0.97	—	14,996	14,996	0.66	0.75	31.2	15,268
Area	1.99	33.5	0.16	15.9	< 0.005	0.01	—	0.01	0.02	—	0.02	0.00	49.8	49.8	< 0.005	< 0.005	—	49.9
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Waste	—	—	—	—	—	—	—	—	—	—	—	256	0.00	256	25.6	0.00	—	896
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	788	788
Total	10.5	41.3	10.6	84.4	0.15	0.15	4.77	4.92	0.14	0.84	0.98	256	15,046	15,302	26.3	0.75	819	17,002
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Mobile	1.55	1.42	1.90	12.5	0.03	0.02	0.87	0.90	0.02	0.15	0.18	—	2,483	2,483	0.11	0.12	5.17	2,528
Area	0.36	6.11	0.03	2.90	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	8.24	8.24	< 0.005	< 0.005	—	8.27
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	42.4	0.00	42.4	4.24	0.00	—	148
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	130	130
Total	1.92	7.53	1.93	15.4	0.03	0.03	0.87	0.90	0.03	0.15	0.18	42.4	2,491	2,533	4.35	0.12	136	2,815

2.6. Operations Emissions by Sector, Mitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Mobile	9.65	8.92	9.37	82.3	0.16	0.14	4.77	4.91	0.13	0.84	0.97	—	16,110	16,110	0.63	0.71	72.3	16,410
Area	4.03	35.4	0.32	32.3	< 0.005	0.02	—	0.02	0.03	—	0.03	0.00	101	101	< 0.005	< 0.005	—	101
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	256	0.00	256	25.6	0.00	—	896
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	788	788
Total	13.7	44.3	9.68	115	0.16	0.16	4.77	4.93	0.16	0.84	1.00	256	16,211	16,467	26.2	0.71	860	18,195
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.41	7.69	10.1	62.9	0.14	0.14	4.77	4.91	0.13	0.84	0.97	—	14,666	14,666	0.65	0.74	1.87	14,905

Area	0.00	31.6	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	256	0.00	256	25.6	0.00	—	—	896
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	788
Total	8.41	39.3	10.1	62.9	0.14	0.14	4.77	4.91	0.13	0.84	0.97	256	14,666	14,922	26.3	0.74	789	16,589
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.51	7.79	10.4	68.5	0.15	0.14	4.77	4.91	0.13	0.84	0.97	—	14,996	14,996	0.66	0.75	31.2	15,268
Area	1.99	33.5	0.16	15.9	< 0.005	0.01	—	0.01	0.02	—	0.02	0.00	49.8	49.8	< 0.005	< 0.005	—	49.9
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	256	0.00	256	25.6	0.00	—	—	896
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	788
Total	10.5	41.3	10.6	84.4	0.15	0.15	4.77	4.92	0.14	0.84	0.98	256	15,046	15,302	26.3	0.75	819	17,002
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.55	1.42	1.90	12.5	0.03	0.02	0.87	0.90	0.02	0.15	0.18	—	2,483	2,483	0.11	0.12	5.17	2,528
Area	0.36	6.11	0.03	2.90	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	8.24	8.24	< 0.005	< 0.005	—	8.27
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	42.4	0.00	42.4	4.24	0.00	—	—	148
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	130
Total	1.92	7.53	1.93	15.4	0.03	0.03	0.87	0.90	0.03	0.15	0.18	42.4	2,491	2,533	4.35	0.12	136	2,815

3. Construction Emissions Details

3.1. Site Preparation (2021) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	5.22	4.39	46.1	37.6	0.05	2.14	—	2.14	1.97	—	1.97	—	5,286	5,286	0.21	0.04	—	5,304
Dust From Material Movement:	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.09	0.07	0.76	0.62	< 0.005	0.04	—	0.04	0.03	—	0.03	—	86.9	86.9	< 0.005	< 0.005	—	87.2
Dust From Material Movement:	—	—	—	—	—	—	0.13	0.13	—	0.06	0.06	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.02	0.01	0.14	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	14.4	14.4	< 0.005	< 0.005	—	14.4
Dust From Material Movement:	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.12	0.13	2.03	0.00	0.00	0.01	0.01	0.00	0.00	—	277	277	0.01	0.01	1.32	281	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	—	4.14	4.14	< 0.005	< 0.005	0.01	4.20	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	—	0.69	0.69	< 0.005	< 0.005	< 0.005	0.70	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Site Preparation (2021) - Mitigated

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

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

Senior Wellness Community in Apple Valley - San Bernardino County Detailed Report, 9/7/2022

Off-Road Equipment	5.22	4.39	46.1	37.6	0.05	2.14	—	2.14	1.97	—	1.97	—	5,286	5,286	0.21	0.04	—	5,304
Dust From Material Movement:	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.09	0.07	0.76	0.62	< 0.005	0.04	—	0.04	0.03	—	0.03	—	86.9	86.9	< 0.005	< 0.005	—	87.2
Dust From Material Movement:	—	—	—	—	—	—	0.13	0.13	—	0.06	0.06	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.02	0.01	0.14	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	14.4	14.4	< 0.005	< 0.005	—	14.4
Dust From Material Movement:	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.14	0.12	0.13	2.03	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	277	277	0.01	0.01	1.32	281

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	—	4.14	4.14	< 0.005	< 0.005	0.01	4.20
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	—	0.69	0.69	< 0.005	< 0.005	< 0.005	0.70
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2021) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	5.18	4.36	46.1	34.1	0.06	2.02	—	2.02	1.86	—	1.86	—	6,591	6,591	0.27	0.05	—	6,613
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	

Senior Wellness Community in Apple Valley - San Bernardino County Detailed Report, 9/7/2022

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.30	3.16	2.33	< 0.005	0.14	—	0.14	0.13	—	0.13	—	451	451	0.02	< 0.005	—	453
Dust From Material Movement:	—	—	—	—	—	—	—	0.25	0.25	—	0.10	0.10	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.58	0.43	< 0.005	0.03	—	0.03	0.02	—	0.02	—	74.7	74.7	< 0.005	< 0.005	—	75.0
Dust From Material Movement:	—	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.15	2.32	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	317	317	0.01	0.01	1.50	321
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.01	0.12	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	19.7	19.7	< 0.005	< 0.005	0.04	20.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	3.27	3.27	< 0.005	< 0.005	0.01	3.31
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Grading (2021) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.18	4.36	46.1	34.1	0.06	2.02	—	2.02	1.86	—	1.86	—	6,591	6,591	0.27	0.05	—	6,613
Dust From Material Movement:	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.30	3.16	2.33	< 0.005	0.14	—	0.14	0.13	—	0.13	—	451	451	0.02	< 0.005	—	453

Senior Wellness Community in Apple Valley - San Bernardino County Detailed Report, 9/7/2022

Dust From Material Movement:	—	—	—	—	—	—	0.25	0.25	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.58	0.43	< 0.005	0.03	—	0.03	0.02	—	0.02	—	74.7	74.7	< 0.005	< 0.005	—	75.0
Dust From Material Movement:	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.15	2.32	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	317	317	0.01	0.01	1.50	321
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	19.7	19.7	< 0.005	< 0.005	0.04	20.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	3.27	3.27	< 0.005	< 0.005	0.01	3.31
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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3.5. Building Construction (2021) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.85	1.55	14.8	14.1	0.02	0.78	—	0.78	0.72	—	0.72	—	2,396	2,396	0.10	0.02	—	2,404
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.85	1.55	14.8	14.1	0.02	0.78	—	0.78	0.72	—	0.72	—	2,396	2,396	0.10	0.02	—	2,404
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	0.52	4.96	4.72	0.01	0.26	—	0.26	0.24	—	0.24	—	802	802	0.03	0.01	—	805
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.91	0.86	< 0.005	0.05	—	0.05	0.04	—	0.04	—	133	133	0.01	< 0.005	—	133
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.00	2.65	2.87	44.2	0.00	0.00	0.31	0.31	0.00	0.00	0.00	—	6,036	6,036	0.25	0.19	28.7	6,127	
Vendor	0.19	0.14	3.81	1.76	0.02	0.05	0.14	0.20	0.05	0.05	0.11	—	2,672	2,672	0.02	0.36	6.99	2,786	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	2.55	2.35	3.19	29.9	0.00	0.00	0.31	0.31	0.00	0.00	0.00	—	5,331	5,331	0.26	0.19	0.74	5,395	
Vendor	0.18	0.13	4.02	1.80	0.02	0.06	0.14	0.20	0.05	0.05	0.11	—	2,673	2,673	0.02	0.36	0.18	2,781	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.86	0.79	1.12	11.2	0.00	0.00	0.10	0.10	0.00	0.00	0.00	—	1,838	1,838	0.09	0.06	4.13	1,863	
Vendor	0.06	0.05	1.35	0.60	0.01	0.02	0.05	0.07	0.02	0.02	0.04	—	894	894	0.01	0.12	1.01	931	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.16	0.14	0.21	2.04	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	304	304	0.01	0.01	0.68	308	
Vendor	0.01	0.01	0.25	0.11	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	—	148	148	< 0.005	0.02	0.17	154	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.6. Building Construction (2021) - Mitigated

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

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

Senior Wellness Community in Apple Valley - San Bernardino County Detailed Report, 9/7/2022

Off-Road Equipment	1.85	1.55	14.8	14.1	0.02	0.78	—	0.78	0.72	—	0.72	—	2,396	2,396	0.10	0.02	—	2,404
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	1.85	1.55	14.8	14.1	0.02	0.78	—	0.78	0.72	—	0.72	—	2,396	2,396	0.10	0.02	—	2,404
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.62	0.52	4.96	4.72	0.01	0.26	—	0.26	0.24	—	0.24	—	802	802	0.03	0.01	—	805
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.11	0.09	0.91	0.86	< 0.005	0.05	—	0.05	0.04	—	0.04	—	133	133	0.01	< 0.005	—	133
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	3.00	2.65	2.87	44.2	0.00	0.00	0.31	0.31	0.00	0.00	0.00	—	6,036	6,036	0.25	0.19	28.7	6,127
Vendor	0.19	0.14	3.81	1.76	0.02	0.05	0.14	0.20	0.05	0.05	0.11	—	2,672	2,672	0.02	0.36	6.99	2,786
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	2.55	2.35	3.19	29.9	0.00	0.00	0.31	0.31	0.00	0.00	0.00	—	5,331	5,331	0.26	0.19	0.74	5,395

Vendor	0.18	0.13	4.02	1.80	0.02	0.06	0.14	0.20	0.05	0.05	0.11	—	2,673	2,673	0.02	0.36	0.18	2,781
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.86	0.79	1.12	11.2	0.00	0.00	0.10	0.10	0.00	0.00	0.00	—	1,838	1,838	0.09	0.06	4.13	1,863
Vendor	0.06	0.05	1.35	0.60	0.01	0.02	0.05	0.07	0.02	0.02	0.04	—	894	894	0.01	0.12	1.01	931
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.21	2.04	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	304	304	0.01	0.01	0.68	308
Vendor	0.01	0.01	0.25	0.11	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	—	148	148	< 0.005	0.02	0.17	154
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2022) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.65	1.38	13.1	13.6	0.02	0.65	—	0.65	0.60	—	0.60	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	1.92	1.99	< 0.005	0.10	—	0.10	0.09	—	0.09	—	352	352	0.01	< 0.005	—	353

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.35	0.36	< 0.005	0.02	—	0.02	0.02	—	0.02	—	58.3	58.3	< 0.005	< 0.005	—	58.5
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.48	2.11	2.86	27.3	0.00	0.00	0.31	0.31	0.00	0.00	—	5,235	5,235	0.26	0.19	0.68	5,298	
Vendor	0.14	0.12	3.52	1.55	0.02	0.04	0.14	0.18	0.04	0.05	0.09	—	2,653	2,653	0.01	0.36	0.18	2,760
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.31	0.44	4.50	0.00	0.00	0.05	0.05	0.00	0.00	0.00	—	791	791	0.04	0.03	1.68	802
Vendor	0.02	0.02	0.52	0.22	< 0.005	0.01	0.02	0.03	0.01	0.01	0.01	—	389	389	< 0.005	0.05	0.44	405
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.08	0.82	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	131	131	0.01	< 0.005	0.28	133
Vendor	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	64.4	64.4	< 0.005	0.01	0.07	67.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2022) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Senior Wellness Community in Apple Valley - San Bernardino County Detailed Report, 9/7/2022

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.65	1.38	13.1	13.6	0.02	0.65	—	0.65	0.60	—	0.60	—	2,397	2,397	0.10	0.02	—	2,406	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.24	0.20	1.92	1.99	< 0.005	0.10	—	0.10	0.09	—	0.09	—	352	352	0.01	< 0.005	—	353	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.04	0.04	0.35	0.36	< 0.005	0.02	—	0.02	0.02	—	0.02	—	58.3	58.3	< 0.005	< 0.005	—	58.5	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	2.48	2.11	2.86	27.3	0.00	0.00	0.31	0.31	0.00	0.00	0.00	—	5,235	5,235	0.26	0.19	0.68	5,298	
Vendor	0.14	0.12	3.52	1.55	0.02	0.04	0.14	0.18	0.04	0.05	0.09	—	2,653	2,653	0.01	0.36	0.18	2,760	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.31	0.44	4.50	0.00	0.00	0.05	0.05	0.00	0.00	—	791	791	0.04	0.03	1.68	802		
Vendor	0.02	0.02	0.52	0.22	< 0.005	0.01	0.02	0.03	0.01	0.01	—	389	389	< 0.005	0.05	0.44	405		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.07	0.06	0.08	0.82	0.00	0.00	0.01	0.01	0.00	0.00	—	131	131	0.01	< 0.005	0.28	133		
Vendor	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	64.4	64.4	< 0.005	0.01	0.07	67.1		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

3.9. Paving (2022) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12	0.94	8.46	10.1	0.01	0.46	—	0.46	0.43	—	0.43	—	1,511	1,511	0.06	0.01	—	1,517
Paving	—	2.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.23	0.28	< 0.005	0.01	—	0.01	0.01	—	0.01	—	41.4	41.4	< 0.005	< 0.005	—	41.6
Paving	—	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Senior Wellness Community in Apple Valley - San Bernardino County Detailed Report, 9/7/2022

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.86	6.86	< 0.005	< 0.005	—	6.88	—
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.11	1.08	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	206	206	0.01	0.01	0.03	208	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	5.81	5.81	< 0.005	< 0.005	0.01	5.89	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.96	0.96	< 0.005	< 0.005	< 0.005	0.98	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Paving (2022) - Mitigated

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

Senior Wellness Community in Apple Valley - San Bernardino County Detailed Report, 9/7/2022

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	1.12	0.94	8.46	10.1	0.01	0.46	—	0.46	0.43	—	0.43	—	1,511	1,511	0.06	0.01	—	1,517
Paving	—	2.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.03	0.03	0.23	0.28	< 0.005	0.01	—	0.01	0.01	—	0.01	—	41.4	41.4	< 0.005	< 0.005	—	41.6
Paving	—	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.01	< 0.005	0.04	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.86	6.86	< 0.005	< 0.005	—	6.88
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

Worker	0.10	0.08	0.11	1.08	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	206	206	0.01	0.01	0.03	208
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	5.81	5.81	< 0.005	< 0.005	0.01	5.89
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.96	0.96	< 0.005	< 0.005	< 0.005	0.98
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2022) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	0.96	1.17	< 0.005	0.04	—	0.04	0.04	—	0.04	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	80.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Senior Wellness Community in Apple Valley - San Bernardino County Detailed Report, 9/7/2022

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.17	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	23.4	23.4	< 0.005	< 0.005	—	23.5
Architectural Coatings	—	14.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.88	3.88	< 0.005	< 0.005	—	3.89
Architectural Coatings	—	2.59	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.42	0.57	5.47	0.00	0.00	0.06	0.06	0.00	0.00	0.00	—	1,047	1,047	0.05	0.04	0.14	1,060
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.11	1.08	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	189	189	0.01	0.01	0.40	192
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.02	0.01	0.02	0.20	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	31.3	31.3	< 0.005	< 0.005	0.07	31.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Architectural Coating (2022) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.19	0.16	0.96	1.17	< 0.005	0.04	—	0.04	0.04	—	0.04	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	80.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.03	0.03	0.17	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	23.4	23.4	< 0.005	< 0.005	—	23.5
Architectural Coatings	—	14.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

Off-Road Equipment	0.01	0.01	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.88	3.88	< 0.005	< 0.005	—	3.89
Architectural Coatings	—	2.59	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.42	0.57	5.47	0.00	0.00	0.06	0.06	0.00	0.00	—	1,047	1,047	0.05	0.04	0.14	1,060	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.11	1.08	0.00	0.00	0.01	0.01	0.00	0.00	—	189	189	0.01	0.01	0.40	192	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.02	0.20	0.00	0.00	< 0.005	< 0.005	0.00	0.00	—	31.3	31.3	< 0.005	< 0.005	0.07	31.7	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Mobile Home Park	4.83	4.58	3.15	27.0	0.05	0.04	0.22	0.26	0.04	0.07	0.11	—	4,749	4,749	0.25	0.24	20.9	4,848
General Heavy Industry	0.07	0.06	0.09	0.79	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	163	163	0.01	0.01	0.74	166
Convenience Market (24 hour)	3.15	2.83	4.05	36.1	0.07	0.06	0.35	0.41	0.06	0.11	0.16	—	7,413	7,413	0.24	0.31	33.5	7,544
Medical Office Building	1.61	1.45	2.07	18.4	0.04	0.03	0.18	0.21	0.03	0.05	0.08	—	3,785	3,785	0.12	0.16	17.1	3,851
Health Club	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Total	9.65	8.92	9.37	82.3	0.16	0.14	0.75	0.89	0.13	0.23	0.36	—	16,110	16,110	0.63	0.71	72.3	16,410
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Mobile Home Park	4.12	3.87	3.40	21.9	0.04	0.04	0.22	0.26	0.04	0.07	0.11	—	4,333	4,333	0.27	0.25	0.54	4,415
General Heavy Industry	0.06	0.05	0.10	0.59	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	148	148	0.01	0.01	0.02	151

Senior Wellness Community in Apple Valley - San Bernardino County Detailed Report, 9/7/2022

Convenience Market (24 hour)	2.80	2.49	4.39	26.8	0.07	0.06	0.35	0.41	0.06	0.11	0.16	—	6,743	6,743	0.25	0.32	0.87	6,845
Medical Office Building	1.43	1.27	2.24	13.7	0.03	0.03	0.18	0.21	0.03	0.05	0.08	—	3,442	3,442	0.13	0.16	0.44	3,495
Health Club	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	8.41	7.69	10.1	62.9	0.14	0.14	0.75	0.89	0.13	0.23	0.36	—	14,666	14,666	0.65	0.74	1.87	14,905
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	0.76	0.72	0.64	4.32	0.01	0.01	0.04	0.05	0.01	0.01	0.02	—	733	733	0.05	0.04	1.49	748
General Heavy Industry	0.01	0.01	0.02	0.12	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	25.1	25.1	< 0.005	< 0.005	0.05	25.6
Convenience Market (24 hour)	0.52	0.46	0.83	5.34	0.01	0.01	0.06	0.07	0.01	0.02	0.03	—	1,142	1,142	0.04	0.05	2.40	1,161
Medical Office Building	0.26	0.24	0.42	2.73	0.01	0.01	0.03	0.04	0.01	0.01	0.02	—	583	583	0.02	0.03	1.22	593
Health Club	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.55	1.42	1.90	12.5	0.03	0.02	0.14	0.16	0.02	0.04	0.07	—	2,483	2,483	0.11	0.12	5.17	2,528

4.1.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Mobile Home Park	4.83	4.58	3.15	27.0	0.05	0.04	0.22	0.26	0.04	0.07	0.11	—	4,749	4,749	0.25	0.24	20.9	4,848
General Heavy Industry	0.07	0.06	0.09	0.79	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	163	163	0.01	0.01	0.74	166
Convenience Market (24 hour)	3.15	2.83	4.05	36.1	0.07	0.06	0.35	0.41	0.06	0.11	0.16	—	7,413	7,413	0.24	0.31	33.5	7,544
Medical Office Building	1.61	1.45	2.07	18.4	0.04	0.03	0.18	0.21	0.03	0.05	0.08	—	3,785	3,785	0.12	0.16	17.1	3,851
Health Club	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Total	9.65	8.92	9.37	82.3	0.16	0.14	0.75	0.89	0.13	0.23	0.36	—	16,110	16,110	0.63	0.71	72.3	16,410
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Mobile Home Park	4.12	3.87	3.40	21.9	0.04	0.04	0.22	0.26	0.04	0.07	0.11	—	4,333	4,333	0.27	0.25	0.54	4,415
General Heavy Industry	0.06	0.05	0.10	0.59	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	148	148	0.01	0.01	0.02	151

Senior Wellness Community in Apple Valley - San Bernardino County Detailed Report, 9/7/2022

Convenience Market (24 hour)	2.80	2.49	4.39	26.8	0.07	0.06	0.35	0.41	0.06	0.11	0.16	—	6,743	6,743	0.25	0.32	0.87	6,845
Medical Office Building	1.43	1.27	2.24	13.7	0.03	0.03	0.18	0.21	0.03	0.05	0.08	—	3,442	3,442	0.13	0.16	0.44	3,495
Health Club	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	8.41	7.69	10.1	62.9	0.14	0.14	0.75	0.89	0.13	0.23	0.36	—	14,666	14,666	0.65	0.74	1.87	14,905
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	0.76	0.72	0.64	4.32	0.01	0.01	0.04	0.05	0.01	0.01	0.02	—	733	733	0.05	0.04	1.49	748
General Heavy Industry	0.01	0.01	0.02	0.12	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	25.1	25.1	< 0.005	< 0.005	0.05	25.6
Convenience Market (24 hour)	0.52	0.46	0.83	5.34	0.01	0.01	0.06	0.07	0.01	0.02	0.03	—	1,142	1,142	0.04	0.05	2.40	1,161
Medical Office Building	0.26	0.24	0.42	2.73	0.01	0.01	0.03	0.04	0.01	0.01	0.02	—	583	583	0.02	0.03	1.22	593
Health Club	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.55	1.42	1.90	12.5	0.03	0.02	0.14	0.16	0.02	0.04	0.07	—	2,483	2,483	0.11	0.12	5.17	2,528

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00	
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00	
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00	
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00	
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00	
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00	
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00	

Senior Wellness Community in Apple Valley - San Bernardino County Detailed Report, 9/7/2022

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.2. Electricity Emissions By Land Use - Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00	
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00	
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00	
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00	
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00	
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00	
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00	
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00	

Senior Wellness Community in Apple Valley - San Bernardino County Detailed Report, 9/7/2022

Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Mobile Home Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Medical Office Building	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Health Club	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Senior Wellness Community in Apple Valley - San Bernardino County Detailed Report, 9/7/2022

Convenience Market (24 hour)	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Medical Office Building	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Health Club	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Medical Office Building	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Health Club	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Mobile Home Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Medical Office Building	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Health Club	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Senior Wellness Community in Apple Valley - San Bernardino County Detailed Report, 9/7/2022

Convenience Market (24 hour)	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Medical Office Building	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Health Club	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Medical Office Building	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Health Club	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.2. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	29.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	2.30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	4.03	3.78	0.32	32.3	< 0.005	0.02	—	0.02	0.03	—	0.03	—	101	101	< 0.005	< 0.005	—	101
Total	4.03	35.4	0.32	32.3	< 0.005	0.02	—	0.02	0.03	—	0.03	0.00	101	101	< 0.005	< 0.005	—	101
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	83.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	29.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	113	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	—	3.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	5.35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.36	0.34	0.03	2.90	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.24	8.24	< 0.005	< 0.005	—	8.27	
Total	0.36	8.70	0.03	2.90	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	8.24	8.24	< 0.005	< 0.005	—	8.27	

4.3.1. Mitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	29.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	2.30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	4.03	3.78	0.32	32.3	< 0.005	0.02	—	0.02	0.03	—	0.03	—	101	101	< 0.005	< 0.005	—	101
Total	4.03	35.4	0.32	32.3	< 0.005	0.02	—	0.02	0.03	—	0.03	0.00	101	101	< 0.005	< 0.005	—	101
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	—	83.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	29.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	113	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	3.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	5.35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.36	0.34	0.03	2.90	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.24	8.24	< 0.005	< 0.005	—	8.27
Total	0.36	8.70	0.03	2.90	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	8.24	8.24	< 0.005	< 0.005	—	8.27

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

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

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

Senior Wellness Community in Apple Valley - San Bernardino County Detailed Report, 9/7/2022

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Senior Wellness Community in Apple Valley - San Bernardino County Detailed Report, 9/7/2022

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

4.4.1. Mitigated

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

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

Senior Wellness Community in Apple Valley - San Bernardino County Detailed Report, 9/7/2022

Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Health Club	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Senior Wellness Community in Apple Valley - San Bernardino County Detailed Report, 9/7/2022

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	48.0	0.00	48.0	4.80	0.00	—	168		
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	137	0.00	137	13.7	0.00	—	481		
Convenie nce Market (24 hour)	—	—	—	—	—	—	—	—	—	—	5.67	0.00	5.67	0.57	0.00	—	19.8		
Medical Office Building	—	—	—	—	—	—	—	—	—	—	29.1	0.00	29.1	2.91	0.00	—	102		
Health Club	—	—	—	—	—	—	—	—	—	—	35.9	0.00	35.9	3.59	0.00	—	126		
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00		
Total	—	—	—	—	—	—	—	—	—	—	256	0.00	256	25.6	0.00	—	896		
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	48.0	0.00	48.0	4.80	0.00	—	168		
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	137	0.00	137	13.7	0.00	—	481		
Convenie nce Market (24 hour)	—	—	—	—	—	—	—	—	—	—	5.67	0.00	5.67	0.57	0.00	—	19.8		

Senior Wellness Community in Apple Valley - San Bernardino County Detailed Report, 9/7/2022

Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	29.1	0.00	29.1	2.91	0.00	—	102
Health Club	—	—	—	—	—	—	—	—	—	—	—	35.9	0.00	35.9	3.59	0.00	—	126
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	256	0.00	256	25.6	0.00	—	896
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	7.95	0.00	7.95	0.79	0.00	—	27.8
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	22.7	0.00	22.7	2.27	0.00	—	79.6
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	0.94	0.00	0.94	0.09	0.00	—	3.28
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	4.82	0.00	4.82	0.48	0.00	—	16.9
Health Club	—	—	—	—	—	—	—	—	—	—	—	5.95	0.00	5.95	0.59	0.00	—	20.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	42.4	0.00	42.4	4.24	0.00	—	148

4.5.1. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
----------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Senior Wellness Community in Apple Valley - San Bernardino County Detailed Report, 9/7/2022

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	48.0	0.00	48.0	4.80	0.00	—	168		
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	137	0.00	137	13.7	0.00	—	481		
Convenie nce Market (24 hour)	—	—	—	—	—	—	—	—	—	—	5.67	0.00	5.67	0.57	0.00	—	19.8		
Medical Office Building	—	—	—	—	—	—	—	—	—	—	29.1	0.00	29.1	2.91	0.00	—	102		
Health Club	—	—	—	—	—	—	—	—	—	—	35.9	0.00	35.9	3.59	0.00	—	126		
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00		
Total	—	—	—	—	—	—	—	—	—	—	256	0.00	256	25.6	0.00	—	896		
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	48.0	0.00	48.0	4.80	0.00	—	168		
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	137	0.00	137	13.7	0.00	—	481		
Convenie nce Market (24 hour)	—	—	—	—	—	—	—	—	—	—	5.67	0.00	5.67	0.57	0.00	—	19.8		

Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	29.1	0.00	29.1	2.91	0.00	—	102
Health Club	—	—	—	—	—	—	—	—	—	—	—	35.9	0.00	35.9	3.59	0.00	—	126
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	256	0.00	256	25.6	0.00	—	896
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	7.95	0.00	7.95	0.79	0.00	—	27.8
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	22.7	0.00	22.7	2.27	0.00	—	79.6
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	0.94	0.00	0.94	0.09	0.00	—	3.28
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	4.82	0.00	4.82	0.48	0.00	—	16.9
Health Club	—	—	—	—	—	—	—	—	—	—	—	5.95	0.00	5.95	0.59	0.00	—	20.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	42.4	0.00	42.4	4.24	0.00	—	148

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Senior Wellness Community in Apple Valley - San Bernardino County Detailed Report, 9/7/2022

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.18	8.18
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	53.5	53.5
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	726	726
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	788	788
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.18	8.18
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	53.5	53.5
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	726	726

Senior Wellness Community in Apple Valley - San Bernardino County Detailed Report, 9/7/2022

Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	788	788
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.35	1.35
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.86	8.86
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	120	120
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	130	130

4.6.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.18	8.18	

Senior Wellness Community in Apple Valley - San Bernardino County Detailed Report, 9/7/2022

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	53.5	53.5
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	726	726
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	788	788
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.18	8.18
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	53.5	53.5
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	726	726
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	788	788
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.35	1.35

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.86	8.86
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	120	120
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	130	130

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

4.7.2. Mitigated

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
---------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Senior Wellness Community in Apple Valley - San Bernardino County Detailed Report, 9/7/2022

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

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

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

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

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

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

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

—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	6/1/2021	6/8/2021	5.00	6.00	—
Grading	Grading	6/9/2021	7/13/2021	5.00	25.0	—
Building Construction	Building Construction	7/14/2021	3/16/2022	5.00	176	—
All-weather access	Paving	3/17/2022	3/30/2022	5.00	10.0	—
Architectural Coating	Architectural Coating	1/1/2022	3/31/2022	5.00	64.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40

Senior Wellness Community in Apple Valley - San Bernardino County Detailed Report, 9/7/2022

Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
All-weather access	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
All-weather access	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
All-weather access	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37

Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
All-weather access	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
All-weather access	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
All-weather access	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	381	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	79.7	10.2	HHDT,MHDT

Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
All-weather access	—	—	—	—
All-weather access	Worker	15.0	18.5	LDA,LDT1,LDT2
All-weather access	Vendor	—	10.2	HHDT,MHDT
All-weather access	Hauling	0.00	20.0	HHDT
All-weather access	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	76.3	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	381	18.5	LDA,LDT1,LDT2

Building Construction	Vendor	79.7	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
All-weather access	—	—	—	—
All-weather access	Worker	15.0	18.5	LDA,LDT1,LDT2
All-weather access	Vendor	—	10.2	HHDT,MHDT
All-weather access	Hauling	0.00	20.0	HHDT
All-weather access	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	76.3	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	969,570	323,190	332,550	110,850	26,920

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
------------	---------------------------------	---------------------------------	----------------------	-------------------------------	---------------------

Site Preparation	0.00	0.00	45.0	0.00	—
Grading	0.00	0.00	75.0	0.00	—
All-weather access	0.00	0.00	0.00	0.00	10.3

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Mobile Home Park	—	0%
General Heavy Industry	0.00	0%
Convenience Market (24 hour)	0.00	0%
Medical Office Building	0.00	0%
Health Club	0.00	0%
Other Asphalt Surfaces	10.3	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2021	0.00	0.00	0.00	0.00
2022	0.00	0.00	0.00	0.00

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Senior Wellness Community in Apple Valley - San Bernardino County Detailed Report, 9/7/2022

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Mobile Home Park	812	812	812	296,367	5,014	5,014	5,014	1,830,068
General Heavy Industry	8.22	8.22	8.22	3,002	177	177	177	64,562
Convenience Market (24 hour)	374	374	374	136,411	8,038	8,038	8,038	2,933,937
Medical Office Building	191	191	191	69,642	4,104	4,104	4,104	1,497,860
Health Club	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Mobile Home Park	812	812	812	296,367	5,014	5,014	5,014	1,830,068
General Heavy Industry	8.22	8.22	8.22	3,002	177	177	177	64,562
Convenience Market (24 hour)	374	374	374	136,411	8,038	8,038	8,038	2,933,937
Medical Office Building	191	191	191	69,642	4,104	4,104	4,104	1,497,860
Health Club	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Mobile Home Park	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	399
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Mobile Home Park	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	399
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
2313372.15	771,124	358,890	119,630	26,920

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBtu/yr)
Mobile Home Park	0.00	0.00	0.0000	0.0000	0.00
General Heavy Industry	0.00	0.00	0.0000	0.0000	0.00
Convenience Market (24 hour)	0.00	0.00	0.0000	0.0000	0.00
Medical Office Building	0.00	0.00	0.0000	0.0000	0.00
Health Club	0.00	0.00	0.0000	0.0000	0.00
Other Asphalt Surfaces	0.00	0.00	0.0000	0.0000	0.00

5.11.2. Mitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBtu/yr)
Mobile Home Park	0.00	0.00	0.0000	0.0000	0.00
General Heavy Industry	0.00	0.00	0.0000	0.0000	0.00
Convenience Market (24 hour)	0.00	0.00	0.0000	0.0000	0.00
Medical Office Building	0.00	0.00	0.0000	0.0000	0.00
Health Club	0.00	0.00	0.0000	0.0000	0.00
Other Asphalt Surfaces	0.00	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Mobile Home Park	0.00	0.00
General Heavy Industry	0.00	0.00
Convenience Market (24 hour)	0.00	0.00
Medical Office Building	0.00	0.00
Health Club	0.00	0.00
Other Asphalt Surfaces	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Mobile Home Park	0.00	0.00
General Heavy Industry	0.00	0.00
Convenience Market (24 hour)	0.00	0.00
Medical Office Building	0.00	0.00
Health Club	0.00	0.00

Other Asphalt Surfaces	0.00	0.00
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5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Mobile Home Park	89.1	0.00
General Heavy Industry	255	0.00
Convenience Market (24 hour)	10.5	0.00
Medical Office Building	54.0	0.00
Health Club	66.7	0.00
Other Asphalt Surfaces	0.00	0.00

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Mobile Home Park	89.1	0.00
General Heavy Industry	255	0.00
Convenience Market (24 hour)	10.5	0.00
Medical Office Building	54.0	0.00
Health Club	66.7	0.00
Other Asphalt Surfaces	0.00	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
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Senior Wellness Community in Apple Valley - San Bernardino County Detailed Report, 9/7/2022

Mobile Home Park	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Mobile Home Park	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Convenience Market (24 hour)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Convenience Market (24 hour)	Supermarket refrigeration and condensing units	R-404A	3,922	26.5	16.5	16.5	18.0
Medical Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.45	0.60	0.00	1.00
Medical Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Health Club	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Health Club	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Mobile Home Park	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Mobile Home Park	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Convenience Market (24 hour)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

Convenience Market (24 hour)	Supermarket refrigeration and condensing units	R-404A	3,922	26.5	16.5	16.5	18.0
Medical Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.45	0.60	0.00	1.00
Medical Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Health Club	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Health Club	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
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5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
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5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
—	—	—	—

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
—	—	—	—

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
—	—	—

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
—	—	—

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
—	—	—	—

5.18.2.2. Mitigated

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

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	34.6	annual days of extreme heat
Extreme Precipitation	0.95	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	3.49	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	N/A	N/A	N/A	N/A

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

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

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

6.3. Adjusted Climate Risk Scores

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

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

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	95.3
AQ-PM	6.85
AQ-DPM	0.54
Drinking Water	63.4
Lead Risk Housing	39.7
Pesticides	0.00
Toxic Releases	19.0
Traffic	7.05
Effect Indicators	—
CleanUp Sites	46.1
Groundwater	0.00
Haz Waste Facilities/Generators	0.00
Impaired Water Bodies	33.2
Solid Waste	0.00
Sensitive Population	—
Asthma	79.7
Cardio-vascular	95.1
Low Birth Weights	90.7
Socioeconomic Factor Indicators	—
Education	55.1
Housing	66.1
Linguistic	12.3
Poverty	59.1

Unemployment	93.7
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7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	24.6888233
Employed	6.159373797
Education	—
Bachelor's or higher	12.89618889
High school enrollment	100
Preschool enrollment	80.67496471
Transportation	—
Auto Access	63.41588605
Active commuting	2.130116771
Social	—
2-parent households	69.2416271
Voting	59.04016425
Neighborhood	—
Alcohol availability	91.86449378
Park access	25.63839343
Retail density	1.360195047
Supermarket access	11.34351341
Tree canopy	0.230976517
Housing	—
Homeownership	72.97574747
Housing habitability	49.31348646

Low-inc homeowner severe housing cost burden	29.56499423
Low-inc renter severe housing cost burden	23.17464391
Uncrowded housing	47.8121391
Health Outcomes	—
Insured adults	51.2511228
Arthritis	1.0
Asthma ER Admissions	14.5
High Blood Pressure	2.5
Cancer (excluding skin)	4.6
Asthma	12.1
Coronary Heart Disease	1.4
Chronic Obstructive Pulmonary Disease	0.7
Diagnosed Diabetes	6.8
Life Expectancy at Birth	23.1
Cognitively Disabled	16.7
Physically Disabled	10.0
Heart Attack ER Admissions	9.0
Mental Health Not Good	27.0
Chronic Kidney Disease	5.2
Obesity	23.9
Pedestrian Injuries	19.6
Physical Health Not Good	12.4
Stroke	3.8
Health Risk Behaviors	—
Binge Drinking	87.0
Current Smoker	18.3
No Leisure Time for Physical Activity	36.8

Climate Change Exposures	—
Wildfire Risk	1.3
SLR Inundation Area	0.0
Children	61.0
Elderly	25.1
English Speaking	91.9
Foreign-born	7.8
Outdoor Workers	39.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	98.0
Traffic Density	3.4
Traffic Access	23.0
Other Indices	—
Hardship	72.1
Other Decision Support	—
2016 Voting	68.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	44.0
Healthy Places Index Score for Project Location (b)	30.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health and Equity Evaluation Scorecard not completed.

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	Utility company is Avellana Power Rural Electrical Cooperative. Avellana is using 100% solar power generated on the project site. No natural gas would be used.
Land Use	mobile home park=26.23 acres, utility parcel (Modeled as industrial)= 4.72 acres, medical office=0.115 acres, Retail=3.38 acres, health club=community center= 0.268 acre, Other asphalt surfaces=streets= 448.668 Tsqft
Construction: Construction Phases	anticipated construction schedule
Construction: Dust From Material Movement	total acres graded
Construction: Architectural Coatings	Rule 1113
Operations: Vehicle Data	per TIA, Note: industrial = utility parcel, health club= community center, other asphalt surfaces=streets. Trip lengths reflect medical and retail services provided on site.
Operations: Hearths	No fireplaces
Operations: Energy Use	100% of the electricity would be generated onsite by solar no natural gas usage
Operations: Water and Waste Water	The project's water will be supplied by wells on the 5 acre parcel and providing 100% the water demand. The project will build and operate a wastewater treatment plant, so no wastewater will leave the site.