

**APPENDIX A:**  
**AIR QUALITY MODELING WORKSHEETS**

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Juniper Grove Project - Antelope Valley APCD Air District, Winter

**Juniper Grove Project**  
**Antelope Valley APCD Air District, Winter**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	101.00	Dwelling Unit	206,990.00	142,014.00	289
Parking Lot	153.00	Space	0.00	0.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	9			<b>Operational Year</b>	2021
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

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

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Project Characteristics -

Land Use - Project Data based on Site Plan dated 01/17/19

Construction Phase - Based on approximate 24-month construction timeline

Off-road Equipment - Equipment use on worst case day

Off-road Equipment - Equipment use on worst-case day

Off-road Equipment - Equipment use on worst-case day

Off-road Equipment - Equipment use on worst-case day

Grading - Estimated 4,000 cy soil export for site clearing phase

Trips and VMT - Assumes 14 cy haul truck capacity and average 20-miles distance to disposal site

Vehicle Trips - Trip rates based on Trip Generation Assessment

Woodstoves - No woodstoves or fireplaces proposed

Stationary Sources - Emergency Generators and Fire Pumps -

Construction Off-road Equipment Mitigation -

Area Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	11,000.00	66.00
tblConstructionPhase	NumDays	155,000.00	430.00
tblConstructionPhase	NumDays	11,000.00	22.00
tblConstructionPhase	NumDays	6,000.00	10.00
tblConstructionPhase	PhaseEndDate	9/7/2818	7/7/2021
tblConstructionPhase	PhaseEndDate	5/11/2734	3/5/2021
tblConstructionPhase	PhaseEndDate	7/9/2776	4/6/2021
tblConstructionPhase	PhaseEndDate	10/25/2080	7/12/2019
tblConstructionPhase	PhaseStartDate	7/10/2776	4/7/2021

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tblConstructionPhase	PhaseStartDate	3/26/2140	7/15/2019
tblConstructionPhase	PhaseStartDate	5/12/2734	3/8/2021
tblConstructionPhase	PhaseStartDate	10/27/2057	7/1/2019
tblFireplaces	FireplaceDayYear	82.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	55.55	0.00
tblFireplaces	NumberNoFireplace	10.10	0.00
tblFireplaces	NumberWood	35.35	0.00
tblGrading	MaterialExported	0.00	4,000.00
tblLandUse	LandUseSquareFeet	101,000.00	142,014.00
tblLandUse	LandUseSquareFeet	61,200.00	0.00
tblLandUse	LotAcreage	2.66	206,990.00
tblLandUse	LotAcreage	1.38	0.00
tblOffRoadEquipment	LoadFactor	0.41	0.41
tblOffRoadEquipment	LoadFactor	0.40	0.40
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.29	0.29
tblOffRoadEquipment	LoadFactor	0.20	0.20
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.42	0.42
tblOffRoadEquipment	LoadFactor	0.20	0.20
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Dozers
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers

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tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Pavers
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	1,000.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	12.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripNumber	500.00	571.00
tblVehicleTrips	ST_TR	6.39	5.23
tblVehicleTrips	SU_TR	5.86	4.79
tblVehicleTrips	WD_TR	6.65	5.44
tblWoodstoves	NumberCatalytic	5.05	0.00
tblWoodstoves	NumberNoncatalytic	5.05	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

**2.0 Emissions Summary**

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**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	2.5729	35.4997	19.3762	0.0652	6.9084	1.1341	7.8356	3.2515	1.1022	4.1064	0.0000	6,745.904 4	6,745.904 4	0.7412	0.0000	6,764.435 4
2020	2.3317	19.3486	18.8531	0.0380	0.6742	0.9879	1.6621	0.1805	0.9603	1.1407	0.0000	3,645.563 2	3,645.563 2	0.4011	0.0000	3,655.591 5
2021	67.9502	17.6058	18.4471	0.0379	0.6742	0.8517	1.5258	0.1805	0.8277	1.0082	0.0000	3,629.433 6	3,629.433 6	0.4561	0.0000	3,639.152 1
<b>Maximum</b>	<b>67.9502</b>	<b>35.4997</b>	<b>19.3762</b>	<b>0.0652</b>	<b>6.9084</b>	<b>1.1341</b>	<b>7.8356</b>	<b>3.2515</b>	<b>1.1022</b>	<b>4.1064</b>	<b>0.0000</b>	<b>6,745.904 4</b>	<b>6,745.904 4</b>	<b>0.7412</b>	<b>0.0000</b>	<b>6,764.435 4</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	2.5729	35.4997	19.3762	0.0652	3.6938	1.1341	4.6210	1.6232	1.1022	2.4781	0.0000	6,745.904 4	6,745.904 4	0.7412	0.0000	6,764.435 4
2020	2.3317	19.3486	18.8531	0.0380	0.6742	0.9879	1.6621	0.1805	0.9603	1.1407	0.0000	3,645.563 2	3,645.563 2	0.4011	0.0000	3,655.591 5
2021	67.9502	17.6058	18.4471	0.0379	0.6742	0.8517	1.5258	0.1805	0.8277	1.0082	0.0000	3,629.433 6	3,629.433 6	0.4561	0.0000	3,639.152 1
<b>Maximum</b>	<b>67.9502</b>	<b>35.4997</b>	<b>19.3762</b>	<b>0.0652</b>	<b>3.6938</b>	<b>1.1341</b>	<b>4.6210</b>	<b>1.6232</b>	<b>1.1022</b>	<b>2.4781</b>	<b>0.0000</b>	<b>6,745.904 4</b>	<b>6,745.904 4</b>	<b>0.7412</b>	<b>0.0000</b>	<b>6,764.435 4</b>

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	38.93	0.00	29.16	45.07	0.00	26.03	0.00	0.00	0.00	0.00	0.00	0.00

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.5109	0.0965	8.3664	4.4000e-004		0.0461	0.0461		0.0461	0.0461	0.0000	15.0373	15.0373	0.0146	0.0000	15.4030
Energy	0.0400	0.3416	0.1454	2.1800e-003		0.0276	0.0276		0.0276	0.0276		436.1042	436.1042	8.3600e-003	8.0000e-003	438.6957
Mobile	1.1169	5.6234	13.0020	0.0412	3.3216	0.0341	3.3557	0.8892	0.0319	0.9211		4,165.7978	4,165.7978	0.1864		4,170.4565
Stationary	0.8204	3.6694	2.0922	3.9400e-003		0.1207	0.1207		0.1207	0.1207		419.7571	419.7571	0.0589		421.2283
<b>Total</b>	<b>6.4881</b>	<b>9.7309</b>	<b>23.6059</b>	<b>0.0477</b>	<b>3.3216</b>	<b>0.2285</b>	<b>3.5501</b>	<b>0.8892</b>	<b>0.2263</b>	<b>1.1155</b>	<b>0.0000</b>	<b>5,036.6963</b>	<b>5,036.6963</b>	<b>0.2682</b>	<b>8.0000e-003</b>	<b>5,045.7836</b>



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**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.5109	0.0965	8.3664	4.4000e-004		0.0461	0.0461		0.0461	0.0461	0.0000	15.0373	15.0373	0.0146	0.0000	15.4030
Energy	0.0400	0.3416	0.1454	2.1800e-003		0.0276	0.0276		0.0276	0.0276		436.1042	436.1042	8.3600e-003	8.0000e-003	438.6957
Mobile	1.1169	5.6234	13.0020	0.0412	3.3216	0.0341	3.3557	0.8892	0.0319	0.9211		4,165.7978	4,165.7978	0.1864		4,170.4565
Stationary	0.8204	3.6694	2.0922	3.9400e-003		0.1207	0.1207		0.1207	0.1207		419.7571	419.7571	0.0589		421.2283
<b>Total</b>	<b>6.4881</b>	<b>9.7309</b>	<b>23.6059</b>	<b>0.0477</b>	<b>3.3216</b>	<b>0.2285</b>	<b>3.5501</b>	<b>0.8892</b>	<b>0.2263</b>	<b>1.1155</b>	<b>0.0000</b>	<b>5,036.6963</b>	<b>5,036.6963</b>	<b>0.2682</b>	<b>8.0000e-003</b>	<b>5,045.7836</b>

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

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	7/12/2019	5	10	
2	Building Construction	Building Construction	7/15/2019	3/5/2021	5	430	
3	Paving	Paving	3/8/2021	4/6/2021	5	22	
4	Architectural Coating	Architectural Coating	4/7/2021	7/7/2021	5	66	

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**Acres of Grading (Site Preparation Phase): 5**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

**Residential Indoor: 287,578; Residential Outdoor: 95,859; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cement and Mortar Mixers	2	8.00	9	0.56
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Pumps	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Paving	Rollers	2	8.00	80	0.38
Paving	Pavers	2	8.00	130	0.42
Architectural Coating	Air Compressors	1	6.00	78	0.48
Architectural Coating	Forklifts	2	8.00	89	0.20
Architectural Coating	Generator Sets	1	2.00	84	0.74

**Trips and VMT**

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	571.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	73.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	4	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

**3.2 Site Preparation - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.8448	0.0000	5.8448	2.9606	0.0000	2.9606			0.0000			0.0000
Off-Road	1.6981	19.3276	7.8301	0.0171		0.8750	0.8750		0.8050	0.8050		1,692.8949	1,692.8949	0.5356		1,706.2853
<b>Total</b>	<b>1.6981</b>	<b>19.3276</b>	<b>7.8301</b>	<b>0.0171</b>	<b>5.8448</b>	<b>0.8750</b>	<b>6.7198</b>	<b>2.9606</b>	<b>0.8050</b>	<b>3.7655</b>		<b>1,692.8949</b>	<b>1,692.8949</b>	<b>0.5356</b>		<b>1,706.2853</b>

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**3.2 Site Preparation - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.5072	16.1431	3.6234	0.0474	0.9979	0.0517	1.0495	0.2735	0.0494	0.3229		4,987.0514	4,987.0514	0.2030		4,992.1266
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0387	0.0290	0.3067	6.6000e-004	0.0657	5.7000e-004	0.0663	0.0174	5.3000e-004	0.0180		65.9581	65.9581	2.6200e-003		66.0235
<b>Total</b>	<b>0.5458</b>	<b>16.1721</b>	<b>3.9301</b>	<b>0.0481</b>	<b>1.0636</b>	<b>0.0522</b>	<b>1.1158</b>	<b>0.2909</b>	<b>0.0500</b>	<b>0.3409</b>		<b>5,053.0095</b>	<b>5,053.0095</b>	<b>0.2056</b>		<b>5,058.1501</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6302	0.0000	2.6302	1.3323	0.0000	1.3323			0.0000			0.0000
Off-Road	1.6981	19.3276	7.8301	0.0171		0.8750	0.8750		0.8050	0.8050	0.0000	1,692.8949	1,692.8949	0.5356		1,706.2853
<b>Total</b>	<b>1.6981</b>	<b>19.3276</b>	<b>7.8301</b>	<b>0.0171</b>	<b>2.6302</b>	<b>0.8750</b>	<b>3.5052</b>	<b>1.3323</b>	<b>0.8050</b>	<b>2.1372</b>	<b>0.0000</b>	<b>1,692.8949</b>	<b>1,692.8949</b>	<b>0.5356</b>		<b>1,706.2853</b>

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**3.2 Site Preparation - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.5072	16.1431	3.6234	0.0474	0.9979	0.0517	1.0495	0.2735	0.0494	0.3229		4,987.0514	4,987.0514	0.2030		4,992.1266
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0387	0.0290	0.3067	6.6000e-004	0.0657	5.7000e-004	0.0663	0.0174	5.3000e-004	0.0180		65.9581	65.9581	2.6200e-003		66.0235
<b>Total</b>	<b>0.5458</b>	<b>16.1721</b>	<b>3.9301</b>	<b>0.0481</b>	<b>1.0636</b>	<b>0.0522</b>	<b>1.1158</b>	<b>0.2909</b>	<b>0.0500</b>	<b>0.3409</b>		<b>5,053.0095</b>	<b>5,053.0095</b>	<b>0.2056</b>		<b>5,058.1501</b>

**3.3 Building Construction - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1722	19.4801	16.2308	0.0289		1.1201	1.1201		1.0890	1.0890		2,739.5165	2,739.5165	0.3767		2,748.9340
<b>Total</b>	<b>2.1722</b>	<b>19.4801</b>	<b>16.2308</b>	<b>0.0289</b>		<b>1.1201</b>	<b>1.1201</b>		<b>1.0890</b>	<b>1.0890</b>		<b>2,739.5165</b>	<b>2,739.5165</b>	<b>0.3767</b>		<b>2,748.9340</b>

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**3.3 Building Construction - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0480	1.3946	0.3470	3.2500e-003	0.0745	8.7900e-003	0.0833	0.0214	8.4100e-003	0.0299		340.4593	340.4593	0.0177		340.9008
Worker	0.3527	0.2644	2.7984	6.0500e-003	0.5997	5.2200e-003	0.6049	0.1591	4.8100e-003	0.1639		601.8678	601.8678	0.0239		602.4644
<b>Total</b>	<b>0.4007</b>	<b>1.6590</b>	<b>3.1454</b>	<b>9.3000e-003</b>	<b>0.6742</b>	<b>0.0140</b>	<b>0.6882</b>	<b>0.1805</b>	<b>0.0132</b>	<b>0.1937</b>		<b>942.3271</b>	<b>942.3271</b>	<b>0.0415</b>		<b>943.3652</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1722	19.4801	16.2308	0.0289		1.1201	1.1201		1.0890	1.0890	0.0000	2,739.5165	2,739.5165	0.3767		2,748.9340
<b>Total</b>	<b>2.1722</b>	<b>19.4801</b>	<b>16.2308</b>	<b>0.0289</b>		<b>1.1201</b>	<b>1.1201</b>		<b>1.0890</b>	<b>1.0890</b>	<b>0.0000</b>	<b>2,739.5165</b>	<b>2,739.5165</b>	<b>0.3767</b>		<b>2,748.9340</b>

Juniper Grove Project - Antelope Valley APCD Air District, Winter

**3.3 Building Construction - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0480	1.3946	0.3470	3.2500e-003	0.0745	8.7900e-003	0.0833	0.0214	8.4100e-003	0.0299		340.4593	340.4593	0.0177		340.9008
Worker	0.3527	0.2644	2.7984	6.0500e-003	0.5997	5.2200e-003	0.6049	0.1591	4.8100e-003	0.1639		601.8678	601.8678	0.0239		602.4644
<b>Total</b>	<b>0.4007</b>	<b>1.6590</b>	<b>3.1454</b>	<b>9.3000e-003</b>	<b>0.6742</b>	<b>0.0140</b>	<b>0.6882</b>	<b>0.1805</b>	<b>0.0132</b>	<b>0.1937</b>		<b>942.3271</b>	<b>942.3271</b>	<b>0.0415</b>		<b>943.3652</b>

**3.3 Building Construction - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9658	17.8407	16.0161	0.0289		0.9772	0.9772		0.9501	0.9501		2,722.7229	2,722.7229	0.3635		2,731.8110
<b>Total</b>	<b>1.9658</b>	<b>17.8407</b>	<b>16.0161</b>	<b>0.0289</b>		<b>0.9772</b>	<b>0.9772</b>		<b>0.9501</b>	<b>0.9501</b>		<b>2,722.7229</b>	<b>2,722.7229</b>	<b>0.3635</b>		<b>2,731.8110</b>

Juniper Grove Project - Antelope Valley APCD Air District, Winter

**3.3 Building Construction - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0405	1.2716	0.3070	3.2300e-003	0.0745	5.7000e-003	0.0802	0.0214	5.4500e-003	0.0269		338.6456	338.6456	0.0165		339.0569
Worker	0.3255	0.2363	2.5299	5.8700e-003	0.5997	5.0500e-003	0.6047	0.1591	4.6500e-003	0.1637		584.1947	584.1947	0.0212		584.7236
<b>Total</b>	<b>0.3659</b>	<b>1.5079</b>	<b>2.8369</b>	<b>9.1000e-003</b>	<b>0.6742</b>	<b>0.0108</b>	<b>0.6849</b>	<b>0.1805</b>	<b>0.0101</b>	<b>0.1906</b>		<b>922.8403</b>	<b>922.8403</b>	<b>0.0376</b>		<b>923.7805</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9658	17.8407	16.0161	0.0289		0.9772	0.9772		0.9501	0.9501	0.0000	2,722.7229	2,722.7229	0.3635		2,731.8110
<b>Total</b>	<b>1.9658</b>	<b>17.8407</b>	<b>16.0161</b>	<b>0.0289</b>		<b>0.9772</b>	<b>0.9772</b>		<b>0.9501</b>	<b>0.9501</b>	<b>0.0000</b>	<b>2,722.7229</b>	<b>2,722.7229</b>	<b>0.3635</b>		<b>2,731.8110</b>



Juniper Grove Project - Antelope Valley APCD Air District, Winter

**3.3 Building Construction - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0405	1.2716	0.3070	3.2300e-003	0.0745	5.7000e-003	0.0802	0.0214	5.4500e-003	0.0269		338.6456	338.6456	0.0165		339.0569
Worker	0.3255	0.2363	2.5299	5.8700e-003	0.5997	5.0500e-003	0.6047	0.1591	4.6500e-003	0.1637		584.1947	584.1947	0.0212		584.7236
<b>Total</b>	<b>0.3659</b>	<b>1.5079</b>	<b>2.8369</b>	<b>9.1000e-003</b>	<b>0.6742</b>	<b>0.0108</b>	<b>0.6849</b>	<b>0.1805</b>	<b>0.0101</b>	<b>0.1906</b>		<b>922.8403</b>	<b>922.8403</b>	<b>0.0376</b>		<b>923.7805</b>

**3.3 Building Construction - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7808	16.2406	15.8287	0.0289		0.8448	0.8448		0.8214	0.8214		2,722.7855	2,722.7855	0.3537		2,731.6274
<b>Total</b>	<b>1.7808</b>	<b>16.2406</b>	<b>15.8287</b>	<b>0.0289</b>		<b>0.8448</b>	<b>0.8448</b>		<b>0.8214</b>	<b>0.8214</b>		<b>2,722.7855</b>	<b>2,722.7855</b>	<b>0.3537</b>		<b>2,731.6274</b>

Juniper Grove Project - Antelope Valley APCD Air District, Winter

**3.3 Building Construction - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0341	1.1508	0.2732	3.2200e-003	0.0745	1.8800e-003	0.0764	0.0214	1.7900e-003	0.0232		336.9961	336.9961	0.0156		337.3855
Worker	0.3050	0.2145	2.3453	5.7200e-003	0.5997	4.9500e-003	0.6046	0.1591	4.5600e-003	0.1636		569.6521	569.6521	0.0195		570.1392
<b>Total</b>	<b>0.3391</b>	<b>1.3652</b>	<b>2.6185</b>	<b>8.9400e-003</b>	<b>0.6742</b>	<b>6.8300e-003</b>	<b>0.6810</b>	<b>0.1805</b>	<b>6.3500e-003</b>	<b>0.1869</b>		<b>906.6481</b>	<b>906.6481</b>	<b>0.0351</b>		<b>907.5248</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7808	16.2406	15.8287	0.0289		0.8448	0.8448		0.8214	0.8214	0.0000	2,722.7855	2,722.7855	0.3537		2,731.6274
<b>Total</b>	<b>1.7808</b>	<b>16.2406</b>	<b>15.8287</b>	<b>0.0289</b>		<b>0.8448</b>	<b>0.8448</b>		<b>0.8214</b>	<b>0.8214</b>	<b>0.0000</b>	<b>2,722.7855</b>	<b>2,722.7855</b>	<b>0.3537</b>		<b>2,731.6274</b>

Juniper Grove Project - Antelope Valley APCD Air District, Winter

**3.3 Building Construction - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0341	1.1508	0.2732	3.2200e-003	0.0745	1.8800e-003	0.0764	0.0214	1.7900e-003	0.0232		336.9961	336.9961	0.0156		337.3855
Worker	0.3050	0.2145	2.3453	5.7200e-003	0.5997	4.9500e-003	0.6046	0.1591	4.5600e-003	0.1636		569.6521	569.6521	0.0195		570.1392
<b>Total</b>	<b>0.3391</b>	<b>1.3652</b>	<b>2.6185</b>	<b>8.9400e-003</b>	<b>0.6742</b>	<b>6.8300e-003</b>	<b>0.6810</b>	<b>0.1805</b>	<b>6.3500e-003</b>	<b>0.1869</b>		<b>906.6481</b>	<b>906.6481</b>	<b>0.0351</b>		<b>907.5248</b>

**3.4 Paving - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8613	8.9331	9.4593	0.0145		0.4804	0.4804		0.4419	0.4419		1,401.9124	1,401.9124	0.4534		1,413.2475
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.8613</b>	<b>8.9331</b>	<b>9.4593</b>	<b>0.0145</b>		<b>0.4804</b>	<b>0.4804</b>		<b>0.4419</b>	<b>0.4419</b>		<b>1,401.9124</b>	<b>1,401.9124</b>	<b>0.4534</b>		<b>1,413.2475</b>

Juniper Grove Project - Antelope Valley APCD Air District, Winter

**3.4 Paving - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0418	0.0294	0.3213	7.8000e-004	0.0822	6.8000e-004	0.0828	0.0218	6.2000e-004	0.0224		78.0345	78.0345	2.6700e-003		78.1013
<b>Total</b>	<b>0.0418</b>	<b>0.0294</b>	<b>0.3213</b>	<b>7.8000e-004</b>	<b>0.0822</b>	<b>6.8000e-004</b>	<b>0.0828</b>	<b>0.0218</b>	<b>6.2000e-004</b>	<b>0.0224</b>		<b>78.0345</b>	<b>78.0345</b>	<b>2.6700e-003</b>		<b>78.1013</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8613	8.9331	9.4593	0.0145		0.4804	0.4804		0.4419	0.4419	0.0000	1,401.9124	1,401.9124	0.4534		1,413.2475
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.8613</b>	<b>8.9331</b>	<b>9.4593</b>	<b>0.0145</b>		<b>0.4804</b>	<b>0.4804</b>		<b>0.4419</b>	<b>0.4419</b>	<b>0.0000</b>	<b>1,401.9124</b>	<b>1,401.9124</b>	<b>0.4534</b>		<b>1,413.2475</b>

Juniper Grove Project - Antelope Valley APCD Air District, Winter

**3.4 Paving - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0418	0.0294	0.3213	7.8000e-004	0.0822	6.8000e-004	0.0828	0.0218	6.2000e-004	0.0224		78.0345	78.0345	2.6700e-003		78.1013
<b>Total</b>	<b>0.0418</b>	<b>0.0294</b>	<b>0.3213</b>	<b>7.8000e-004</b>	<b>0.0822</b>	<b>6.8000e-004</b>	<b>0.0828</b>	<b>0.0218</b>	<b>6.2000e-004</b>	<b>0.0224</b>		<b>78.0345</b>	<b>78.0345</b>	<b>2.6700e-003</b>		<b>78.1013</b>

**3.5 Architectural Coating - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	67.3193					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.5682	4.6884	5.0861	7.6900e-003		0.3043	0.3043		0.2908	0.2908		734.7487	734.7487	0.1235		737.8360
<b>Total</b>	<b>67.8875</b>	<b>4.6884</b>	<b>5.0861</b>	<b>7.6900e-003</b>		<b>0.3043</b>	<b>0.3043</b>		<b>0.2908</b>	<b>0.2908</b>		<b>734.7487</b>	<b>734.7487</b>	<b>0.1235</b>		<b>737.8360</b>

Juniper Grove Project - Antelope Valley APCD Air District, Winter

**3.5 Architectural Coating - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0627	0.0441	0.4819	1.1800e-003	0.1232	1.0200e-003	0.1242	0.0327	9.4000e-004	0.0336		117.0518	117.0518	4.0000e-003		117.1519
<b>Total</b>	<b>0.0627</b>	<b>0.0441</b>	<b>0.4819</b>	<b>1.1800e-003</b>	<b>0.1232</b>	<b>1.0200e-003</b>	<b>0.1242</b>	<b>0.0327</b>	<b>9.4000e-004</b>	<b>0.0336</b>		<b>117.0518</b>	<b>117.0518</b>	<b>4.0000e-003</b>		<b>117.1519</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	67.3193					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.5682	4.6884	5.0861	7.6900e-003		0.3043	0.3043		0.2908	0.2908	0.0000	734.7487	734.7487	0.1235		737.8360
<b>Total</b>	<b>67.8875</b>	<b>4.6884</b>	<b>5.0861</b>	<b>7.6900e-003</b>		<b>0.3043</b>	<b>0.3043</b>		<b>0.2908</b>	<b>0.2908</b>	<b>0.0000</b>	<b>734.7487</b>	<b>734.7487</b>	<b>0.1235</b>		<b>737.8360</b>

Juniper Grove Project - Antelope Valley APCD Air District, Winter

**3.5 Architectural Coating - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0627	0.0441	0.4819	1.1800e-003	0.1232	1.0200e-003	0.1242	0.0327	9.4000e-004	0.0336		117.0518	117.0518	4.0000e-003		117.1519
<b>Total</b>	<b>0.0627</b>	<b>0.0441</b>	<b>0.4819</b>	<b>1.1800e-003</b>	<b>0.1232</b>	<b>1.0200e-003</b>	<b>0.1242</b>	<b>0.0327</b>	<b>9.4000e-004</b>	<b>0.0336</b>		<b>117.0518</b>	<b>117.0518</b>	<b>4.0000e-003</b>		<b>117.1519</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Juniper Grove Project - Antelope Valley APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.1169	5.6234	13.0020	0.0412	3.3216	0.0341	3.3557	0.8892	0.0319	0.9211		4,165.7978	4,165.7978	0.1864		4,170.4565
Unmitigated	1.1169	5.6234	13.0020	0.0412	3.3216	0.0341	3.3557	0.8892	0.0319	0.9211		4,165.7978	4,165.7978	0.1864		4,170.4565

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	549.44	528.23	483.79	1,525,234	1,525,234
Parking Lot	0.00	0.00	0.00		
Total	549.44	528.23	483.79	1,525,234	1,525,234

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	40.20	19.20	40.60	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.615376	0.037728	0.150170	0.105389	0.017165	0.005087	0.018058	0.036632	0.002196	0.001885	0.007444	0.001552	0.001318
Parking Lot	0.615376	0.037728	0.150170	0.105389	0.017165	0.005087	0.018058	0.036632	0.002196	0.001885	0.007444	0.001552	0.001318



Juniper Grove Project - Antelope Valley APCD Air District, Winter

**5.0 Energy Detail**

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Historical Energy Use: N

**5.1 Mitigation Measures Energy**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0400	0.3416	0.1454	2.1800e-003		0.0276	0.0276		0.0276	0.0276		436.1042	436.1042	8.3600e-003	8.0000e-003	438.6957
NaturalGas Unmitigated	0.0400	0.3416	0.1454	2.1800e-003		0.0276	0.0276		0.0276	0.0276		436.1042	436.1042	8.3600e-003	8.0000e-003	438.6957

Juniper Grove Project - Antelope Valley APCD Air District, Winter

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	3706.89	0.0400	0.3416	0.1454	2.1800e-003		0.0276	0.0276		0.0276	0.0276		436.1042	436.1042	8.3600e-003	8.0000e-003	438.6957
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0400</b>	<b>0.3416</b>	<b>0.1454</b>	<b>2.1800e-003</b>		<b>0.0276</b>	<b>0.0276</b>		<b>0.0276</b>	<b>0.0276</b>		<b>436.1042</b>	<b>436.1042</b>	<b>8.3600e-003</b>	<b>8.0000e-003</b>	<b>438.6957</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	3.70689	0.0400	0.3416	0.1454	2.1800e-003		0.0276	0.0276		0.0276	0.0276		436.1042	436.1042	8.3600e-003	8.0000e-003	438.6957
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0400</b>	<b>0.3416</b>	<b>0.1454</b>	<b>2.1800e-003</b>		<b>0.0276</b>	<b>0.0276</b>		<b>0.0276</b>	<b>0.0276</b>		<b>436.1042</b>	<b>436.1042</b>	<b>8.3600e-003</b>	<b>8.0000e-003</b>	<b>438.6957</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Juniper Grove Project - Antelope Valley APCD Air District, Winter

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.5109	0.0965	8.3664	4.4000e-004		0.0461	0.0461		0.0461	0.0461	0.0000	15.0373	15.0373	0.0146	0.0000	15.4030
Unmitigated	4.5109	0.0965	8.3664	4.4000e-004		0.0461	0.0461		0.0461	0.0461	0.0000	15.0373	15.0373	0.0146	0.0000	15.4030

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.2173					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.0391					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2545	0.0965	8.3664	4.4000e-004		0.0461	0.0461		0.0461	0.0461		15.0373	15.0373	0.0146		15.4030
<b>Total</b>	<b>4.5109</b>	<b>0.0965</b>	<b>8.3664</b>	<b>4.4000e-004</b>		<b>0.0461</b>	<b>0.0461</b>		<b>0.0461</b>	<b>0.0461</b>	<b>0.0000</b>	<b>15.0373</b>	<b>15.0373</b>	<b>0.0146</b>	<b>0.0000</b>	<b>15.4030</b>

Juniper Grove Project - Antelope Valley APCD Air District, Winter

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.2173					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.0391					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2545	0.0965	8.3664	4.4000e-004		0.0461	0.0461		0.0461	0.0461		15.0373	15.0373	0.0146		15.4030
<b>Total</b>	<b>4.5109</b>	<b>0.0965</b>	<b>8.3664</b>	<b>4.4000e-004</b>		<b>0.0461</b>	<b>0.0461</b>		<b>0.0461</b>	<b>0.0461</b>	<b>0.0000</b>	<b>15.0373</b>	<b>15.0373</b>	<b>0.0146</b>	<b>0.0000</b>	<b>15.4030</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

- Institute Recycling and Composting Services

Juniper Grove Project - Antelope Valley APCD Air District, Winter

**9.0 Operational Offroad**

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

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.5	12	1000	0.73	Diesel

**Boilers**

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

Equipment Type	Number
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**10.1 Stationary Sources**

**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (750 - 9999 HP)	0.8204	3.6694	2.0922	3.9400e-003		0.1207	0.1207		0.1207	0.1207		419.7571	419.7571	0.0589		421.2283
<b>Total</b>	<b>0.8204</b>	<b>3.6694</b>	<b>2.0922</b>	<b>3.9400e-003</b>		<b>0.1207</b>	<b>0.1207</b>		<b>0.1207</b>	<b>0.1207</b>		<b>419.7571</b>	<b>419.7571</b>	<b>0.0589</b>		<b>421.2283</b>

Juniper Grove Project - Antelope Valley APCD Air District, Winter

**11.0 Vegetation**

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Juniper Grove Project - Antelope Valley APCD Air District, Summer

**Juniper Grove Project**  
**Antelope Valley APCD Air District, Summer**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	101.00	Dwelling Unit	206,990.00	142,014.00	289
Parking Lot	153.00	Space	0.00	0.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	9			<b>Operational Year</b>	2021
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MWhr)</b>	702.44	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

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

Juniper Grove Project - Antelope Valley APCD Air District, Summer

Project Characteristics -

Land Use - Project Data based on Site Plan dated 01/17/19

Construction Phase - Based on approximate 24-month construction timeline

Off-road Equipment - Equipment use on worst case day

Off-road Equipment - Equipment use on worst-case day

Off-road Equipment - Equipment use on worst-case day

Off-road Equipment - Equipment use on worst-case day

Grading - Estimated 4,000 cy soil export for site clearing phase

Trips and VMT - Assumes 14 cy haul truck capacity and average 20-miles distance to disposal site

Vehicle Trips - Trip rates based on Trip Generation Assessment

Woodstoves - No woodstoves or fireplaces proposed

Stationary Sources - Emergency Generators and Fire Pumps -

Construction Off-road Equipment Mitigation -

Area Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	11,000.00	66.00
tblConstructionPhase	NumDays	155,000.00	430.00
tblConstructionPhase	NumDays	11,000.00	22.00
tblConstructionPhase	NumDays	6,000.00	10.00
tblConstructionPhase	PhaseEndDate	9/7/2818	7/7/2021
tblConstructionPhase	PhaseEndDate	5/11/2734	3/5/2021
tblConstructionPhase	PhaseEndDate	7/9/2776	4/6/2021
tblConstructionPhase	PhaseEndDate	10/25/2080	7/12/2019
tblConstructionPhase	PhaseStartDate	7/10/2776	4/7/2021



Juniper Grove Project - Antelope Valley APCD Air District, Summer

tblConstructionPhase	PhaseStartDate	3/26/2140	7/15/2019
tblConstructionPhase	PhaseStartDate	5/12/2734	3/8/2021
tblConstructionPhase	PhaseStartDate	10/27/2057	7/1/2019
tblFireplaces	FireplaceDayYear	82.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	55.55	0.00
tblFireplaces	NumberNoFireplace	10.10	0.00
tblFireplaces	NumberWood	35.35	0.00
tblGrading	MaterialExported	0.00	4,000.00
tblLandUse	LandUseSquareFeet	101,000.00	142,014.00
tblLandUse	LandUseSquareFeet	61,200.00	0.00
tblLandUse	LotAcreage	2.66	206,990.00
tblLandUse	LotAcreage	1.38	0.00
tblOffRoadEquipment	LoadFactor	0.41	0.41
tblOffRoadEquipment	LoadFactor	0.40	0.40
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.29	0.29
tblOffRoadEquipment	LoadFactor	0.20	0.20
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.42	0.42
tblOffRoadEquipment	LoadFactor	0.20	0.20
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Dozers
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers

Juniper Grove Project - Antelope Valley APCD Air District, Summer

tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Pavers
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	1,000.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	12.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripNumber	500.00	571.00
tblVehicleTrips	ST_TR	6.39	5.23
tblVehicleTrips	SU_TR	5.86	4.79
tblVehicleTrips	WD_TR	6.65	5.44
tblWoodstoves	NumberCatalytic	5.05	0.00
tblWoodstoves	NumberNoncatalytic	5.05	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

**2.0 Emissions Summary**

Juniper Grove Project - Antelope Valley APCD Air District, Summer

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	2.5980	35.3763	20.0031	0.0666	6.9084	1.1340	7.8347	3.2515	1.1021	4.1055	0.0000	6,897.1350	6,897.1350	0.7261	0.0000	6,915.2865
2020	2.3548	19.3438	19.4262	0.0390	0.6742	0.9879	1.6620	0.1805	0.9602	1.1407	0.0000	3,737.8004	3,737.8004	0.4029	0.0000	3,747.8732
2021	67.9550	17.6052	18.9844	0.0388	0.6742	0.8516	1.5258	0.1805	0.8277	1.0082	0.0000	3,719.8083	3,719.8083	0.4565	0.0000	3,729.5657
<b>Maximum</b>	<b>67.9550</b>	<b>35.3763</b>	<b>20.0031</b>	<b>0.0666</b>	<b>6.9084</b>	<b>1.1340</b>	<b>7.8347</b>	<b>3.2515</b>	<b>1.1021</b>	<b>4.1055</b>	<b>0.0000</b>	<b>6,897.1350</b>	<b>6,897.1350</b>	<b>0.7261</b>	<b>0.0000</b>	<b>6,915.2865</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	2.5980	35.3763	20.0031	0.0666	3.6938	1.1340	4.6200	1.6232	1.1021	2.4772	0.0000	6,897.1350	6,897.1350	0.7261	0.0000	6,915.2865
2020	2.3548	19.3438	19.4262	0.0390	0.6742	0.9879	1.6620	0.1805	0.9602	1.1407	0.0000	3,737.8004	3,737.8004	0.4029	0.0000	3,747.8732
2021	67.9550	17.6052	18.9844	0.0388	0.6742	0.8516	1.5258	0.1805	0.8277	1.0082	0.0000	3,719.8083	3,719.8083	0.4565	0.0000	3,729.5657
<b>Maximum</b>	<b>67.9550</b>	<b>35.3763</b>	<b>20.0031</b>	<b>0.0666</b>	<b>3.6938</b>	<b>1.1340</b>	<b>4.6200</b>	<b>1.6232</b>	<b>1.1021</b>	<b>2.4772</b>	<b>0.0000</b>	<b>6,897.1350</b>	<b>6,897.1350</b>	<b>0.7261</b>	<b>0.0000</b>	<b>6,915.2865</b>

Juniper Grove Project - Antelope Valley APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	38.93	0.00	29.16	45.07	0.00	26.03	0.00	0.00	0.00	0.00	0.00	0.00

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.5109	0.0965	8.3664	4.4000e-004		0.0461	0.0461		0.0461	0.0461	0.0000	15.0373	15.0373	0.0146	0.0000	15.4030
Energy	0.0400	0.3416	0.1454	2.1800e-003		0.0276	0.0276		0.0276	0.0276		436.1042	436.1042	8.3600e-003	8.0000e-003	438.6957
Mobile	1.3599	5.5762	15.2170	0.0455	3.3216	0.0339	3.3556	0.8892	0.0317	0.9209		4,599.6179	4,599.6179	0.1922		4,604.4216
Stationary	0.8204	3.6694	2.0922	3.9400e-003		0.1207	0.1207		0.1207	0.1207		419.7571	419.7571	0.0589		421.2283
<b>Total</b>	<b>6.7312</b>	<b>9.6837</b>	<b>25.8210</b>	<b>0.0521</b>	<b>3.3216</b>	<b>0.2283</b>	<b>3.5500</b>	<b>0.8892</b>	<b>0.2261</b>	<b>1.1153</b>	<b>0.0000</b>	<b>5,470.5164</b>	<b>5,470.5164</b>	<b>0.2740</b>	<b>8.0000e-003</b>	<b>5,479.7486</b>

Juniper Grove Project - Antelope Valley APCD Air District, Summer

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.5109	0.0965	8.3664	4.4000e-004		0.0461	0.0461		0.0461	0.0461	0.0000	15.0373	15.0373	0.0146	0.0000	15.4030
Energy	0.0400	0.3416	0.1454	2.1800e-003		0.0276	0.0276		0.0276	0.0276		436.1042	436.1042	8.3600e-003	8.0000e-003	438.6957
Mobile	1.3599	5.5762	15.2170	0.0455	3.3216	0.0339	3.3556	0.8892	0.0317	0.9209		4,599.6179	4,599.6179	0.1922		4,604.4216
Stationary	0.8204	3.6694	2.0922	3.9400e-003		0.1207	0.1207		0.1207	0.1207		419.7571	419.7571	0.0589		421.2283
<b>Total</b>	<b>6.7312</b>	<b>9.6837</b>	<b>25.8210</b>	<b>0.0521</b>	<b>3.3216</b>	<b>0.2283</b>	<b>3.5500</b>	<b>0.8892</b>	<b>0.2261</b>	<b>1.1153</b>	<b>0.0000</b>	<b>5,470.5164</b>	<b>5,470.5164</b>	<b>0.2740</b>	<b>8.0000e-003</b>	<b>5,479.7486</b>

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

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	7/12/2019	5	10	
2	Building Construction	Building Construction	7/15/2019	3/5/2021	5	430	
3	Paving	Paving	3/8/2021	4/6/2021	5	22	
4	Architectural Coating	Architectural Coating	4/7/2021	7/7/2021	5	66	

Juniper Grove Project - Antelope Valley APCD Air District, Summer

**Acres of Grading (Site Preparation Phase): 5**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

**Residential Indoor: 287,578; Residential Outdoor: 95,859; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cement and Mortar Mixers	2	8.00	9	0.56
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Pumps	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Paving	Rollers	2	8.00	80	0.38
Paving	Pavers	2	8.00	130	0.42
Architectural Coating	Air Compressors	1	6.00	78	0.48
Architectural Coating	Forklifts	2	8.00	89	0.20
Architectural Coating	Generator Sets	1	2.00	84	0.74

**Trips and VMT**

Juniper Grove Project - Antelope Valley APCD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	571.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	73.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	4	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

**3.2 Site Preparation - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.8448	0.0000	5.8448	2.9606	0.0000	2.9606			0.0000			0.0000
Off-Road	1.6981	19.3276	7.8301	0.0171		0.8750	0.8750		0.8050	0.8050		1,692.8949	1,692.8949	0.5356		1,706.2853
<b>Total</b>	<b>1.6981</b>	<b>19.3276</b>	<b>7.8301</b>	<b>0.0171</b>	<b>5.8448</b>	<b>0.8750</b>	<b>6.7198</b>	<b>2.9606</b>	<b>0.8050</b>	<b>3.7655</b>		<b>1,692.8949</b>	<b>1,692.8949</b>	<b>0.5356</b>		<b>1,706.2853</b>

Juniper Grove Project - Antelope Valley APCD Air District, Summer

**3.2 Site Preparation - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.4878	16.0213	3.2821	0.0488	0.9979	0.0507	1.0486	0.2735	0.0485	0.3220		5,129.4749	5,129.4749	0.1874		5,134.1605
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0416	0.0274	0.3799	7.5000e-004	0.0657	5.7000e-004	0.0663	0.0174	5.3000e-004	0.0180		74.7652	74.7652	3.0200e-003		74.8407
<b>Total</b>	<b>0.5294</b>	<b>16.0487</b>	<b>3.6620</b>	<b>0.0496</b>	<b>1.0636</b>	<b>0.0513</b>	<b>1.1149</b>	<b>0.2909</b>	<b>0.0490</b>	<b>0.3400</b>		<b>5,204.2401</b>	<b>5,204.2401</b>	<b>0.1904</b>		<b>5,209.0012</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6302	0.0000	2.6302	1.3323	0.0000	1.3323			0.0000			0.0000
Off-Road	1.6981	19.3276	7.8301	0.0171		0.8750	0.8750		0.8050	0.8050	0.0000	1,692.8949	1,692.8949	0.5356		1,706.2853
<b>Total</b>	<b>1.6981</b>	<b>19.3276</b>	<b>7.8301</b>	<b>0.0171</b>	<b>2.6302</b>	<b>0.8750</b>	<b>3.5052</b>	<b>1.3323</b>	<b>0.8050</b>	<b>2.1372</b>	<b>0.0000</b>	<b>1,692.8949</b>	<b>1,692.8949</b>	<b>0.5356</b>		<b>1,706.2853</b>



Juniper Grove Project - Antelope Valley APCD Air District, Summer

**3.2 Site Preparation - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.4878	16.0213	3.2821	0.0488	0.9979	0.0507	1.0486	0.2735	0.0485	0.3220		5,129.4749	5,129.4749	0.1874		5,134.1605
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0416	0.0274	0.3799	7.5000e-004	0.0657	5.7000e-004	0.0663	0.0174	5.3000e-004	0.0180		74.7652	74.7652	3.0200e-003		74.8407
<b>Total</b>	<b>0.5294</b>	<b>16.0487</b>	<b>3.6620</b>	<b>0.0496</b>	<b>1.0636</b>	<b>0.0513</b>	<b>1.1149</b>	<b>0.2909</b>	<b>0.0490</b>	<b>0.3400</b>		<b>5,204.2401</b>	<b>5,204.2401</b>	<b>0.1904</b>		<b>5,209.0012</b>

**3.3 Building Construction - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1722	19.4801	16.2308	0.0289		1.1201	1.1201		1.0890	1.0890		2,739.5165	2,739.5165	0.3767		2,748.9340
<b>Total</b>	<b>2.1722</b>	<b>19.4801</b>	<b>16.2308</b>	<b>0.0289</b>		<b>1.1201</b>	<b>1.1201</b>		<b>1.0890</b>	<b>1.0890</b>		<b>2,739.5165</b>	<b>2,739.5165</b>	<b>0.3767</b>		<b>2,748.9340</b>

Juniper Grove Project - Antelope Valley APCD Air District, Summer

**3.3 Building Construction - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0459	1.3997	0.3055	3.3800e-003	0.0745	8.6600e-003	0.0831	0.0214	8.2900e-003	0.0297		354.4978	354.4978	0.0161		354.9000
Worker	0.3800	0.2497	3.4668	6.8700e-003	0.5997	5.2200e-003	0.6049	0.1591	4.8100e-003	0.1639		682.2324	682.2324	0.0276		682.9212
<b>Total</b>	<b>0.4259</b>	<b>1.6495</b>	<b>3.7723</b>	<b>0.0103</b>	<b>0.6742</b>	<b>0.0139</b>	<b>0.6880</b>	<b>0.1805</b>	<b>0.0131</b>	<b>0.1936</b>		<b>1,036.7302</b>	<b>1,036.7302</b>	<b>0.0436</b>		<b>1,037.8211</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1722	19.4801	16.2308	0.0289		1.1201	1.1201		1.0890	1.0890	0.0000	2,739.5165	2,739.5165	0.3767		2,748.9340
<b>Total</b>	<b>2.1722</b>	<b>19.4801</b>	<b>16.2308</b>	<b>0.0289</b>		<b>1.1201</b>	<b>1.1201</b>		<b>1.0890</b>	<b>1.0890</b>	<b>0.0000</b>	<b>2,739.5165</b>	<b>2,739.5165</b>	<b>0.3767</b>		<b>2,748.9340</b>

Juniper Grove Project - Antelope Valley APCD Air District, Summer

**3.3 Building Construction - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0459	1.3997	0.3055	3.3800e-003	0.0745	8.6600e-003	0.0831	0.0214	8.2900e-003	0.0297		354.4978	354.4978	0.0161		354.9000
Worker	0.3800	0.2497	3.4668	6.8700e-003	0.5997	5.2200e-003	0.6049	0.1591	4.8100e-003	0.1639		682.2324	682.2324	0.0276		682.9212
<b>Total</b>	<b>0.4259</b>	<b>1.6495</b>	<b>3.7723</b>	<b>0.0103</b>	<b>0.6742</b>	<b>0.0139</b>	<b>0.6880</b>	<b>0.1805</b>	<b>0.0131</b>	<b>0.1936</b>		<b>1,036.7302</b>	<b>1,036.7302</b>	<b>0.0436</b>		<b>1,037.8211</b>

**3.3 Building Construction - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9658	17.8407	16.0161	0.0289		0.9772	0.9772		0.9501	0.9501		2,722.7229	2,722.7229	0.3635		2,731.8110
<b>Total</b>	<b>1.9658</b>	<b>17.8407</b>	<b>16.0161</b>	<b>0.0289</b>		<b>0.9772</b>	<b>0.9772</b>		<b>0.9501</b>	<b>0.9501</b>		<b>2,722.7229</b>	<b>2,722.7229</b>	<b>0.3635</b>		<b>2,731.8110</b>

Juniper Grove Project - Antelope Valley APCD Air District, Summer

**3.3 Building Construction - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0385	1.2798	0.2684	3.3700e-003	0.0745	5.6300e-003	0.0801	0.0214	5.3900e-003	0.0268		352.8052	352.8052	0.0149		353.1784
Worker	0.3505	0.2233	3.1417	6.6600e-003	0.5997	5.0500e-003	0.6047	0.1591	4.6500e-003	0.1637		662.2723	662.2723	0.0245		662.8838
<b>Total</b>	<b>0.3890</b>	<b>1.5032</b>	<b>3.4100</b>	<b>0.0100</b>	<b>0.6742</b>	<b>0.0107</b>	<b>0.6848</b>	<b>0.1805</b>	<b>0.0100</b>	<b>0.1905</b>		<b>1,015.0775</b>	<b>1,015.0775</b>	<b>0.0394</b>		<b>1,016.0623</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9658	17.8407	16.0161	0.0289		0.9772	0.9772		0.9501	0.9501	0.0000	2,722.7229	2,722.7229	0.3635		2,731.8110
<b>Total</b>	<b>1.9658</b>	<b>17.8407</b>	<b>16.0161</b>	<b>0.0289</b>		<b>0.9772</b>	<b>0.9772</b>		<b>0.9501</b>	<b>0.9501</b>	<b>0.0000</b>	<b>2,722.7229</b>	<b>2,722.7229</b>	<b>0.3635</b>		<b>2,731.8110</b>

Juniper Grove Project - Antelope Valley APCD Air District, Summer

**3.3 Building Construction - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0385	1.2798	0.2684	3.3700e-003	0.0745	5.6300e-003	0.0801	0.0214	5.3900e-003	0.0268		352.8052	352.8052	0.0149		353.1784
Worker	0.3505	0.2233	3.1417	6.6600e-003	0.5997	5.0500e-003	0.6047	0.1591	4.6500e-003	0.1637		662.2723	662.2723	0.0245		662.8838
<b>Total</b>	<b>0.3890</b>	<b>1.5032</b>	<b>3.4100</b>	<b>0.0100</b>	<b>0.6742</b>	<b>0.0107</b>	<b>0.6848</b>	<b>0.1805</b>	<b>0.0100</b>	<b>0.1905</b>		<b>1,015.0775</b>	<b>1,015.0775</b>	<b>0.0394</b>		<b>1,016.0623</b>

**3.3 Building Construction - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7808	16.2406	15.8287	0.0289		0.8448	0.8448		0.8214	0.8214		2,722.7855	2,722.7855	0.3537		2,731.6274
<b>Total</b>	<b>1.7808</b>	<b>16.2406</b>	<b>15.8287</b>	<b>0.0289</b>		<b>0.8448</b>	<b>0.8448</b>		<b>0.8214</b>	<b>0.8214</b>		<b>2,722.7855</b>	<b>2,722.7855</b>	<b>0.3537</b>		<b>2,731.6274</b>

Juniper Grove Project - Antelope Valley APCD Air District, Summer

**3.3 Building Construction - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0323	1.1618	0.2365	3.3500e-003	0.0745	1.8300e-003	0.0763	0.0214	1.7500e-003	0.0232		351.1614	351.1614	0.0141		351.5133
Worker	0.3284	0.2028	2.9192	6.4900e-003	0.5997	4.9500e-003	0.6046	0.1591	4.5600e-003	0.1636		645.8614	645.8614	0.0225		646.4250
<b>Total</b>	<b>0.3607</b>	<b>1.3646</b>	<b>3.1557</b>	<b>9.8400e-003</b>	<b>0.6742</b>	<b>6.7800e-003</b>	<b>0.6809</b>	<b>0.1805</b>	<b>6.3100e-003</b>	<b>0.1868</b>		<b>997.0228</b>	<b>997.0228</b>	<b>0.0366</b>		<b>997.9383</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7808	16.2406	15.8287	0.0289		0.8448	0.8448		0.8214	0.8214	0.0000	2,722.7855	2,722.7855	0.3537		2,731.6274
<b>Total</b>	<b>1.7808</b>	<b>16.2406</b>	<b>15.8287</b>	<b>0.0289</b>		<b>0.8448</b>	<b>0.8448</b>		<b>0.8214</b>	<b>0.8214</b>	<b>0.0000</b>	<b>2,722.7855</b>	<b>2,722.7855</b>	<b>0.3537</b>		<b>2,731.6274</b>

Juniper Grove Project - Antelope Valley APCD Air District, Summer

**3.3 Building Construction - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0323	1.1618	0.2365	3.3500e-003	0.0745	1.8300e-003	0.0763	0.0214	1.7500e-003	0.0232		351.1614	351.1614	0.0141		351.5133
Worker	0.3284	0.2028	2.9192	6.4900e-003	0.5997	4.9500e-003	0.6046	0.1591	4.5600e-003	0.1636		645.8614	645.8614	0.0225		646.4250
<b>Total</b>	<b>0.3607</b>	<b>1.3646</b>	<b>3.1557</b>	<b>9.8400e-003</b>	<b>0.6742</b>	<b>6.7800e-003</b>	<b>0.6809</b>	<b>0.1805</b>	<b>6.3100e-003</b>	<b>0.1868</b>		<b>997.0228</b>	<b>997.0228</b>	<b>0.0366</b>		<b>997.9383</b>

**3.4 Paving - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8613	8.9331	9.4593	0.0145		0.4804	0.4804		0.4419	0.4419		1,401.9124	1,401.9124	0.4534		1,413.2475
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.8613</b>	<b>8.9331</b>	<b>9.4593</b>	<b>0.0145</b>		<b>0.4804</b>	<b>0.4804</b>		<b>0.4419</b>	<b>0.4419</b>		<b>1,401.9124</b>	<b>1,401.9124</b>	<b>0.4534</b>		<b>1,413.2475</b>

Juniper Grove Project - Antelope Valley APCD Air District, Summer

**3.4 Paving - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0450	0.0278	0.3999	8.9000e-004	0.0822	6.8000e-004	0.0828	0.0218	6.2000e-004	0.0224		88.4742	88.4742	3.0900e-003		88.5514
<b>Total</b>	<b>0.0450</b>	<b>0.0278</b>	<b>0.3999</b>	<b>8.9000e-004</b>	<b>0.0822</b>	<b>6.8000e-004</b>	<b>0.0828</b>	<b>0.0218</b>	<b>6.2000e-004</b>	<b>0.0224</b>		<b>88.4742</b>	<b>88.4742</b>	<b>3.0900e-003</b>		<b>88.5514</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8613	8.9331	9.4593	0.0145		0.4804	0.4804		0.4419	0.4419	0.0000	1,401.9124	1,401.9124	0.4534		1,413.2475
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.8613</b>	<b>8.9331</b>	<b>9.4593</b>	<b>0.0145</b>		<b>0.4804</b>	<b>0.4804</b>		<b>0.4419</b>	<b>0.4419</b>	<b>0.0000</b>	<b>1,401.9124</b>	<b>1,401.9124</b>	<b>0.4534</b>		<b>1,413.2475</b>



Juniper Grove Project - Antelope Valley APCD Air District, Summer

**3.4 Paving - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0450	0.0278	0.3999	8.9000e-004	0.0822	6.8000e-004	0.0828	0.0218	6.2000e-004	0.0224		88.4742	88.4742	3.0900e-003		88.5514
<b>Total</b>	<b>0.0450</b>	<b>0.0278</b>	<b>0.3999</b>	<b>8.9000e-004</b>	<b>0.0822</b>	<b>6.8000e-004</b>	<b>0.0828</b>	<b>0.0218</b>	<b>6.2000e-004</b>	<b>0.0224</b>		<b>88.4742</b>	<b>88.4742</b>	<b>3.0900e-003</b>		<b>88.5514</b>

**3.5 Architectural Coating - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	67.3193					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.5682	4.6884	5.0861	7.6900e-003		0.3043	0.3043		0.2908	0.2908		734.7487	734.7487	0.1235		737.8360
<b>Total</b>	<b>67.8875</b>	<b>4.6884</b>	<b>5.0861</b>	<b>7.6900e-003</b>		<b>0.3043</b>	<b>0.3043</b>		<b>0.2908</b>	<b>0.2908</b>		<b>734.7487</b>	<b>734.7487</b>	<b>0.1235</b>		<b>737.8360</b>

Juniper Grove Project - Antelope Valley APCD Air District, Summer

**3.5 Architectural Coating - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0675	0.0417	0.5998	1.3300e-003	0.1232	1.0200e-003	0.1242	0.0327	9.4000e-004	0.0336		132.7113	132.7113	4.6300e-003		132.8271
<b>Total</b>	<b>0.0675</b>	<b>0.0417</b>	<b>0.5998</b>	<b>1.3300e-003</b>	<b>0.1232</b>	<b>1.0200e-003</b>	<b>0.1242</b>	<b>0.0327</b>	<b>9.4000e-004</b>	<b>0.0336</b>		<b>132.7113</b>	<b>132.7113</b>	<b>4.6300e-003</b>		<b>132.8271</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	67.3193					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.5682	4.6884	5.0861	7.6900e-003		0.3043	0.3043		0.2908	0.2908	0.0000	734.7487	734.7487	0.1235		737.8360
<b>Total</b>	<b>67.8875</b>	<b>4.6884</b>	<b>5.0861</b>	<b>7.6900e-003</b>		<b>0.3043</b>	<b>0.3043</b>		<b>0.2908</b>	<b>0.2908</b>	<b>0.0000</b>	<b>734.7487</b>	<b>734.7487</b>	<b>0.1235</b>		<b>737.8360</b>

Juniper Grove Project - Antelope Valley APCD Air District, Summer

**3.5 Architectural Coating - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0675	0.0417	0.5998	1.3300e-003	0.1232	1.0200e-003	0.1242	0.0327	9.4000e-004	0.0336		132.7113	132.7113	4.6300e-003		132.8271
<b>Total</b>	<b>0.0675</b>	<b>0.0417</b>	<b>0.5998</b>	<b>1.3300e-003</b>	<b>0.1232</b>	<b>1.0200e-003</b>	<b>0.1242</b>	<b>0.0327</b>	<b>9.4000e-004</b>	<b>0.0336</b>		<b>132.7113</b>	<b>132.7113</b>	<b>4.6300e-003</b>		<b>132.8271</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Juniper Grove Project - Antelope Valley APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3599	5.5762	15.2170	0.0455	3.3216	0.0339	3.3556	0.8892	0.0317	0.9209		4,599.6179	4,599.6179	0.1922		4,604.4216
Unmitigated	1.3599	5.5762	15.2170	0.0455	3.3216	0.0339	3.3556	0.8892	0.0317	0.9209		4,599.6179	4,599.6179	0.1922		4,604.4216

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	549.44	528.23	483.79	1,525,234	1,525,234
Parking Lot	0.00	0.00	0.00		
Total	549.44	528.23	483.79	1,525,234	1,525,234

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	40.20	19.20	40.60	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.615376	0.037728	0.150170	0.105389	0.017165	0.005087	0.018058	0.036632	0.002196	0.001885	0.007444	0.001552	0.001318
Parking Lot	0.615376	0.037728	0.150170	0.105389	0.017165	0.005087	0.018058	0.036632	0.002196	0.001885	0.007444	0.001552	0.001318

Juniper Grove Project - Antelope Valley APCD Air District, Summer

**5.0 Energy Detail**

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Historical Energy Use: N

**5.1 Mitigation Measures Energy**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0400	0.3416	0.1454	2.1800e-003		0.0276	0.0276		0.0276	0.0276		436.1042	436.1042	8.3600e-003	8.0000e-003	438.6957
NaturalGas Unmitigated	0.0400	0.3416	0.1454	2.1800e-003		0.0276	0.0276		0.0276	0.0276		436.1042	436.1042	8.3600e-003	8.0000e-003	438.6957

Juniper Grove Project - Antelope Valley APCD Air District, Summer

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	3706.89	0.0400	0.3416	0.1454	2.1800e-003		0.0276	0.0276		0.0276	0.0276		436.1042	436.1042	8.3600e-003	8.0000e-003	438.6957
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0400</b>	<b>0.3416</b>	<b>0.1454</b>	<b>2.1800e-003</b>		<b>0.0276</b>	<b>0.0276</b>		<b>0.0276</b>	<b>0.0276</b>		<b>436.1042</b>	<b>436.1042</b>	<b>8.3600e-003</b>	<b>8.0000e-003</b>	<b>438.6957</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	3.70689	0.0400	0.3416	0.1454	2.1800e-003		0.0276	0.0276		0.0276	0.0276		436.1042	436.1042	8.3600e-003	8.0000e-003	438.6957
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0400</b>	<b>0.3416</b>	<b>0.1454</b>	<b>2.1800e-003</b>		<b>0.0276</b>	<b>0.0276</b>		<b>0.0276</b>	<b>0.0276</b>		<b>436.1042</b>	<b>436.1042</b>	<b>8.3600e-003</b>	<b>8.0000e-003</b>	<b>438.6957</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Juniper Grove Project - Antelope Valley APCD Air District, Summer

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.5109	0.0965	8.3664	4.4000e-004		0.0461	0.0461		0.0461	0.0461	0.0000	15.0373	15.0373	0.0146	0.0000	15.4030
Unmitigated	4.5109	0.0965	8.3664	4.4000e-004		0.0461	0.0461		0.0461	0.0461	0.0000	15.0373	15.0373	0.0146	0.0000	15.4030

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.2173					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.0391					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2545	0.0965	8.3664	4.4000e-004		0.0461	0.0461		0.0461	0.0461		15.0373	15.0373	0.0146		15.4030
<b>Total</b>	<b>4.5109</b>	<b>0.0965</b>	<b>8.3664</b>	<b>4.4000e-004</b>		<b>0.0461</b>	<b>0.0461</b>		<b>0.0461</b>	<b>0.0461</b>	<b>0.0000</b>	<b>15.0373</b>	<b>15.0373</b>	<b>0.0146</b>	<b>0.0000</b>	<b>15.4030</b>

Juniper Grove Project - Antelope Valley APCD Air District, Summer

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.2173					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.0391					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2545	0.0965	8.3664	4.4000e-004		0.0461	0.0461		0.0461	0.0461		15.0373	15.0373	0.0146		15.4030
<b>Total</b>	<b>4.5109</b>	<b>0.0965</b>	<b>8.3664</b>	<b>4.4000e-004</b>		<b>0.0461</b>	<b>0.0461</b>		<b>0.0461</b>	<b>0.0461</b>	<b>0.0000</b>	<b>15.0373</b>	<b>15.0373</b>	<b>0.0146</b>	<b>0.0000</b>	<b>15.4030</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

- Institute Recycling and Composting Services



Juniper Grove Project - Antelope Valley APCD Air District, Summer

**9.0 Operational Offroad**

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

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.5	12	1000	0.73	Diesel

**Boilers**

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

Equipment Type	Number
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**10.1 Stationary Sources**

**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (750 - 9999 HP)	0.8204	3.6694	2.0922	3.9400e-003		0.1207	0.1207		0.1207	0.1207		419.7571	419.7571	0.0589		421.2283
<b>Total</b>	<b>0.8204</b>	<b>3.6694</b>	<b>2.0922</b>	<b>3.9400e-003</b>		<b>0.1207</b>	<b>0.1207</b>		<b>0.1207</b>	<b>0.1207</b>		<b>419.7571</b>	<b>419.7571</b>	<b>0.0589</b>		<b>421.2283</b>

Juniper Grove Project - Antelope Valley APCD Air District, Summer

**11.0 Vegetation**

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