

Thorntree Grading and Mini Storage - Butte County, Summer

Thorntree Grading and Mini Storage

Butte County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	68.00	1000sqft	7.00	68,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	71
Climate Zone	3	Operational Year			2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Site is 7 acres
- Construction Phase - vacant site no demo
- Off-road Equipment -
- Vehicle Trips - per ITE manual

Table Name	Column Name	Default Value	New Value
tblLandUse	LotAcreage	1.56	7.00
tblVehicleTrips	WD_TR	1.68	1.65

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2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
2019	4.4710	45.6708	23.2548	0.0399	18.2379	2.3918	20.6297	9.9762	2.2005	12.1767	0.0000	3,956,360 ₃	3,956,360 ₃	1.2024	0.0000	3,986,419 ₉
2020	79.0777	20.9696	18.8392	0.0342	0.3839	1.1299	1.5137	0.1042	1.0625	1.1668	0.0000	3,301,268 ₅	3,301,268 ₅	0.7216	0.0000	3,318,094 ₇
Maximum	79.0777	45.6708	23.2548	0.0399	18.2379	2.3918	20.6297	9.9762	2.2005	12.1767	0.0000	3,956,360 ₃	3,956,360 ₃	1.2024	0.0000	3,986,419 ₉

Mitigated Construction

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
2019	4.4710	45.6708	23.2548	0.0399	18.2379	2.3918	20.6297	9.9762	2.2005	12.1767	0.0000	3,956,360 ₃	3,956,360 ₃	1.2024	0.0000	3,986,419 ₉
2020	79.0777	20.9696	18.8392	0.0342	0.3839	1.1299	1.5137	0.1042	1.0625	1.1668	0.0000	3,301,268 ₅	3,301,268 ₅	0.7216	0.0000	3,318,094 ₇
Maximum	79.0777	45.6708	23.2548	0.0399	18.2379	2.3918	20.6297	9.9762	2.2005	12.1767	0.0000	3,956,360 ₃	3,956,360 ₃	1.2024	0.0000	3,986,419 ₉

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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	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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2.2 Overall Operational

Unmitigated Operational

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Area	1.8876	6.0000e-005	6.9700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0149	0.0149	4.0000e-005		0.0159
Energy	0.0363	0.3302	0.2774	1.9800e-003		0.0251	0.0251		0.0251	0.0251		396.2740	396.2740	7.6000e-003	7.2700e-003	398.6288
Mobile	0.4150	2.5402	4.5939	0.0137	0.8754	0.0144	0.8898	0.2349	0.0136	0.2485		1,391,272 ³	1,391,272 ³	0.1020		1,393,822 ⁰
Total	2.3390	2.8705	4.8782	0.0157	0.8754	0.0396	0.9149	0.2349	0.0388	0.2736		1,787,561²	1,787,561²	0.1096	7.2700e-003	1,792,466⁷

Mitigated Operational

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Area	1.8876	6.0000e-005	6.9700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0149	0.0149	4.0000e-005		0.0159
Energy	0.0363	0.3302	0.2774	1.9800e-003		0.0251	0.0251		0.0251	0.0251		396.2740	396.2740	7.6000e-003	7.2700e-003	398.6288
Mobile	0.4150	2.5402	4.5939	0.0137	0.8754	0.0144	0.8898	0.2349	0.0136	0.2485		1,391,272 ³	1,391,272 ³	0.1020		1,393,822 ⁰
Total	2.3390	2.8705	4.8782	0.0157	0.8754	0.0396	0.9149	0.2349	0.0388	0.2736		1,787,561²	1,787,561²	0.1096	7.2700e-003	1,792,466⁷

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	8/23/2019	9/5/2019	5	10	
2	Grading	Grading	9/6/2019	10/3/2019	5	20	
3	Building Construction	Building Construction	10/4/2019	8/20/2020	5	230	
4	Paving	Paving	8/21/2020	9/17/2020	5	20	
5	Architectural Coating	Architectural Coating	9/18/2020	10/15/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 102,000; Non-Residential Outdoor: 34,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	12.54	10.52	20.00	LD_Mix	HDT_Mix	HDDT
Grading	6	15.00	0.00	0.00	12.54	10.52	20.00	LD_Mix	HDT_Mix	HDDT
Building Construction	9	29.00	11.00	0.00	12.54	10.52	20.00	LD_Mix	HDT_Mix	HDDT
Paving	6	15.00	0.00	0.00	12.54	10.52	20.00	LD_Mix	HDT_Mix	HDDT
Architectural Coating	1	6.00	0.00	0.00	12.54	10.52	20.00	LD_Mix	HDT_Mix	HDDT

3.1 Mitigation Measures Construction

Thorntree Grading and Mini Storage - Butte County, Summer

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
Total	4.3350	45.5727	22.0630	0.0380	18.0663	2.3904	20.4566	9.9307	2.1991	12.1298		3,766.4529	3,766.4529	1.1917		3,796.2445

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	0.1360	0.0981	1.1918	1.9200e-003	0.1717	1.4400e-003	0.1731	0.0455	1.3300e-003	0.0469		189.9074	189.9074	0.0107		190.1754
Total	0.1360	0.0981	1.1918	1.9200e-003	0.1717	1.4400e-003	0.1731	0.0455	1.3300e-003	0.0469		189.9074	189.9074	0.0107		190.1754

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3.2 Site Preparation - 2019

Mitigated Construction On-Site

Category	lb/day															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766,452 ⁹	3,766,452 ⁹	1,1917		3,796,244 ⁵
Total	4.3350	45.5727	22.0630	0.0380	18.0663	2.3904	20.4566	9.9307	2.1991	12.1298	0.0000	3,766,452⁹	3,766,452⁹	1,1917		3,796,244⁵

Mitigated Construction Off-Site

Category	lb/day															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	0.1360	0.0981	1.1918	1.9200e-003	0.1717	1.4400e-003	0.1731	0.0455	1.3300e-003	0.0469		189,9074	189,9074	0.0107		190,1754
Total	0.1360	0.0981	1.1918	1.9200e-003	0.1717	1.4400e-003	0.1731	0.0455	1.3300e-003	0.0469		189,9074	189,9074	0.0107		190,1754

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3.3 Grading - 2019

Unmitigated Construction On-Site

Category	lb/day															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297	1.3974	1.3974	1.3974	1.2856	1.2856	1.2856		2,936,806 ⁸	2,936,806 ⁸	0.9292		2,960,036 ¹
Total	2.5805	28.3480	16.2934	0.0297	6.5523	1.3974	7.9497	3.3675	1.2856	4.6531		2,936,806⁸	2,936,806⁸	0.9292		2,960,036¹

Unmitigated Construction Off-Site

Category	lb/day															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	0.1133	0.0817	0.9932	1.6000e-003	0.1431	1.2000e-003	0.1443	0.0379	1.1100e-003	0.0391		158,2562	158,2562	8.9300e-003		158,4795
Total	0.1133	0.0817	0.9932	1.6000e-003	0.1431	1.2000e-003	0.1443	0.0379	1.1100e-003	0.0391		158,2562	158,2562	8.9300e-003		158,4795

Thorntree Grading and Mini Storage - Butte County, Summer

3.3 Grading - 2019

Mitigated Construction On-Site

Category	lb/day															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297	1.3974	1.3974	1.3974	1.2856	1.2856	1.2856	0.0000	2,936,806 ⁸	2,936,806 ⁸	0.9292		2,960,036 ¹
Total	2.5805	28.3480	16.2934	0.0297	6.5523	1.3974	7.9497	3.3675	1.2856	4.6531	0.0000	2,936,806⁸	2,936,806⁸	0.9292		2,960,036¹

Mitigated Construction Off-Site

Category	lb/day															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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
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
Worker	0.1133	0.0817	0.9932	1.6000e-003	0.1431	1.2000e-003	0.1443	0.0379	1.1100e-003	0.0391			158,2562	8.9300e-003		158,4795
Total	0.1133	0.0817	0.9932	1.6000e-003	0.1431	1.2000e-003	0.1443	0.0379	1.1100e-003	0.0391			158,2562	8.9300e-003		158,4795

Thorntree Grading and Mini Storage - Butte County, Summer

3.4 Building Construction - 2019

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591,580 2	2,591,580 2	0.6313		2,607.363 5
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591,580 2	2,591,580 2	0.6313		2,607.363 5

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	0.0741	1.8141	0.3778	4.3400e-003	0.1073	0.0163	0.1236	0.0309	0.0156	0.0465		454.3560	454.3560	0.0384		455.3161
Worker	0.2191	0.1580	1.9202	3.0900e-003	0.2766	2.3200e-003	0.2789	0.0734	2.1400e-003	0.0755		305.9619	305.9619	0.0173		306.3937
Total	0.2931	1.9721	2.2979	7.4300e-003	0.3839	0.0186	0.4025	0.1042	0.0177	0.1220		760.3179	760.3179	0.0557		761.7098

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3.4 Building Construction - 2019

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2.591.580 2	2.591.580 2	0.6313		2.607.363 5
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591,580 2	2,591,580 2	0.6313		2,607,363 5

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	0.0741	1.8141	0.3778	4.3400e-003	0.1073	0.0163	0.1236	0.0309	0.0156	0.0465		454.3560	454.3560	0.0384		455.3161
Worker	0.2191	0.1580	1.9202	3.0900e-003	0.2766	2.3200e-003	0.2789	0.0734	2.1400e-003	0.0755		305.9619	305.9619	0.0173		306.3937
Total	0.2931	1.9721	2.2979	7.4300e-003	0.3839	0.0186	0.4025	0.1042	0.0177	0.1220		760.3179	760.3179	0.0557		761.7098

Thorntree Grading and Mini Storage - Butte County, Summer

3.4 Building Construction - 2020

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2.553.063	1	2.553.063	0.6229		2.568.634
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2.553.063	1	2.553.063	0.6229		2.568.634

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	0.0585	1.6451	0.3165	4.3100e-003	0.1073	0.0106	0.1179	0.0309	0.0102	0.0411		451.3168	451.3168	0.0355		452.2049
Worker	0.1960	0.1384	1.6741	2.9900e-003	0.2766	2.1900e-003	0.2788	0.0734	2.0200e-003	0.0754		296.8887	296.8887	0.0147		297.2554
Total	0.2544	1.7835	1.9907	7.3000e-003	0.3839	0.0128	0.3967	0.1042	0.0122	0.1164		748.2055	748.2055	0.0502		749.4602

Thorntree Grading and Mini Storage - Butte County, Summer

3.4 Building Construction - 2020

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day															
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2.553,063	2.553,063	0.6229		2,568,634
												1	1			5
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553,063	2,553,063	0.6229		2,568,634
												1	1			5

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	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	0.0585	1.6451	0.3165	4.3100e-003	0.1073	0.0106	0.1179	0.0309	0.0102	0.0411		451.3168	451.3168	0.0355		452.2049
Worker	0.1960	0.1384	1.6741	2.9900e-003	0.2766	2.1900e-003	0.2788	0.0734	2.0200e-003	0.0754		296.8887	296.8887	0.0147		297.2554
Total	0.2544	1.7835	1.9907	7.3000e-003	0.3839	0.0128	0.3967	0.1042	0.0122	0.1164		748.2055	748.2055	0.0502		749.4602
												748.2055	748.2055	0.0502		749.4602

Thorntree Grading and Mini Storage - Butte County, Summer

3.5 Paving - 2020

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day															
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	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	0.1014	0.0716	0.8659	1.5500e-003	0.1431	1.1300e-003	0.1442	0.0379	1.0400e-003	0.0390		153.5631	153.5631	7.5800e-003		153.7528
Total	0.1014	0.0716	0.8659	1.5500e-003	0.1431	1.1300e-003	0.1442	0.0379	1.0400e-003	0.0390		153.5631	153.5631	7.5800e-003		153.7528

Thorntree Grading and Mini Storage - Butte County, Summer

3.5 Paving - 2020

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day															
Off-Road	1.3566	14.0656	14.6521	0.0228	0.7528	0.7528	0.7528	0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140			2,225.5841
Paving	0.0000				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Total	1.3566	14.0656	14.6521	0.0228	0.7528	0.7528	0.7528	0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140			2,225.5841

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	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
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
Worker	0.1014	0.0716	0.8659	1.5500e-003	0.1431	1.1300e-003	0.1442	0.0379	1.0400e-003	0.0390			153.5631	7.5800e-003		153.7528
Total	0.1014	0.0716	0.8659	1.5500e-003	0.1431	1.1300e-003	0.1442	0.0379	1.0400e-003	0.0390			153.5631	7.5800e-003		153.7528

Thorntree Grading and Mini Storage - Butte County, Summer

3.6 Architectural Coating - 2020

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Archit. Coating	78.7950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	79.0372	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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
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	0.0406	0.0286	0.3464	6.2000e-004	0.0572	4.5000e-004	0.0577	0.0152	4.2000e-004	0.0156		61.4253	61.4253	3.0300e-003		61.5011
Total	0.0406	0.0286	0.3464	6.2000e-004	0.0572	4.5000e-004	0.0577	0.0152	4.2000e-004	0.0156		61.4253	61.4253	3.0300e-003		61.5011

Thorntree Grading and Mini Storage - Butte County, Summer

3.6 Architectural Coating - 2020

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Archit. Coating	78.7950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	79.0372	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	0.0406	0.0286	0.3464	6.2000e-004	0.0572	4.5000e-004	0.0577	0.0152	4.2000e-004	0.0156		61.4253	61.4253	3.0300e-003		61.5011
Total	0.0406	0.0286	0.3464	6.2000e-004	0.0572	4.5000e-004	0.0577	0.0152	4.2000e-004	0.0156		61.4253	61.4253	3.0300e-003		61.5011

4.0 Operational Detail - Mobile

Thorntree Grading and Mini Storage - Butte County, Summer

4.1 Mitigation Measures Mobile

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated	0.4150	2.5402	4.5939	0.0137	0.8754	0.0144	0.8898	0.2349	0.0136	0.2485	1,391,272	3	1,391,272	3	0.1020	1,393,822
Unmitigated	0.4150	2.5402	4.5939	0.0137	0.8754	0.0144	0.8898	0.2349	0.0136	0.2485	1,391,272	3	1,391,272	3	0.1020	1,393,822
	lb/day															

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Unrefrigerated Warehouse-No Rail	112.20	114.24	114.24	402,849	402,849
Total	112.20	114.24	114.24	402,849	402,849

4.3 Trip Type Information

Unrefrigerated Warehouse-No	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
Unrefrigerated Warehouse-No	10.52	10.52	10.52	10.52	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.514547	0.034230	0.180067	0.120126	0.034848	0.006594	0.018358	0.079646	0.001635	0.001462	0.005861	0.001268	0.001358

Thorntree Grading and Mini Storage - Butte County, Summer

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
NaturalGas Mitigated	0.0363	0.3302	0.2774	1.9800e-003	0.0251	0.0251	0.0251	0.0251	0.0251	0.0251	396.2740	396.2740	396.2740	7.6000e-003	7.2700e-003	398.6288
NaturalGas Unmitigated	0.0363	0.3302	0.2774	1.9800e-003	0.0251	0.0251	0.0251	0.0251	0.0251	0.0251	396.2740	396.2740	396.2740	7.6000e-003	7.2700e-003	398.6288
	lb/day															
	lb/day															

Thorntree Grading and Mini Storage - Butte County, Summer

5.2 Energy by Land Use - Natural Gas

Unmitigated

Land Use	Natural Gas Use kBtu/Yr	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unrefrigerated Warehouse-No Rail	3368.33	0.0363	0.3302	0.2774	1.9800e-003		0.0251	0.0251		0.0251	0.0251		396.2740	396.2740	7.6000e-003	7.2700e-003	398.6288
Total		0.0363	0.3302	0.2774	1.9800e-003		0.0251	0.0251		0.0251	0.0251		396.2740	396.2740	7.6000e-003	7.2700e-003	398.6288

Mitigated

Land Use	Natural Gas Use kBtu/Yr	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unrefrigerated Warehouse-No Rail	3.36833	0.0363	0.3302	0.2774	1.9800e-003		0.0251	0.0251		0.0251	0.0251		396.2740	396.2740	7.6000e-003	7.2700e-003	398.6288
Total		0.0363	0.3302	0.2774	1.9800e-003		0.0251	0.0251		0.0251	0.0251		396.2740	396.2740	7.6000e-003	7.2700e-003	398.6288

6.0 Area Detail

6.1 Mitigation Measures Area

Thorntree Grading and Mini Storage - Butte County, Summer

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated	1.8876	6.0000e-005	6.9700e-003	0.0000	2.0000e-005	2.0000e-005	2.0000e-005	2.0000e-005	2.0000e-005	2.0000e-005	0.0149	0.0149	0.0149	4.0000e-005		0.0159
Unmitigated	1.8876	6.0000e-005	6.9700e-003	0.0000	2.0000e-005	2.0000e-005	2.0000e-005	2.0000e-005	2.0000e-005	2.0000e-005	0.0149	0.0149	0.0149	4.0000e-005		0.0159

6.2 Area by SubCategory

Unmitigated

SubCategory	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Architectural Coating	0.4318				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4552				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Landscaping	6.5000e-004	6.0000e-005	6.9700e-003	0.0000	2.0000e-005	2.0000e-005	2.0000e-005	2.0000e-005	2.0000e-005	2.0000e-005	0.0149	0.0149	0.0149	4.0000e-005		0.0159
Total	1.8876	6.0000e-005	6.9700e-003	0.0000	2.0000e-005	2.0000e-005	2.0000e-005	2.0000e-005	2.0000e-005	2.0000e-005	0.0149	0.0149	0.0149	4.0000e-005		0.0159

Thorntree Grading and Mini Storage - Butte County, Summer

6.2 Area by SubCategory

Mitigated

SubCategory	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Architectural Coating	0.4318				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4552				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Landscaping	6.5000e-004	6.0000e-005	6.9700e-003	0.0000	2.0000e-005	2.0000e-005	2.0000e-005	2.0000e-005	2.0000e-005	2.0000e-005		0.0149	0.0149	4.0000e-005		0.0159
Total	1.8876	6.0000e-005	6.9700e-003	0.0000	2.0000e-005	2.0000e-005	2.0000e-005	2.0000e-005	2.0000e-005	2.0000e-005		0.0149	0.0149	4.0000e-005		0.0159

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Thorntree Grading and Mini Storage - Butte County, Summer

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

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

Equipment Type	Number
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11.0 Vegetation
