

CalEEMod Data

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Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Winter

Lake Shastina CSD Wastewater Improvement Project
Siskiyou County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	1.50	1000sqft	0.03	1,500.00	0
Other Non-Asphalt Surfaces	4.10	Acre	4.10	178,596.00	0
Other Asphalt Surfaces	0.25	Acre	0.25	10,890.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	85
Climate Zone	14			Operational Year	2020
Utility Company	PacifiCorp				
CO2 Intensity (lb/MWhr)	1656.39	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Winter

Project Characteristics - Start of Construction and Operational Year per project construction schedule.

Land Use - Other Non-Asphalt Surfaces land use subtype was used for the wastewater ponds and some of the utility infrastructure improvements. Other Asphalt Surfaces land use subtype was used for the new sewer force main along Lake Shore Drive and a portion of the sewer line off of Tony Lema Drive. General Heavy Industry land use subtype was used to obtain estimates of operational emissions for the headworks facility and lift station improvements.

Construction Phase - Construction schedule for Grading and Building Construction phases were modified per project description. The default values were used for all other categories. Construction was conservatively assumed to last for 100 days.

Grading - Estimated that approximately 325 c.y. of material would be imported for the sewer pipeline trenches. Estimated that approximately 160 c.y. of waste material would be exported. Assumed that the approximately 4.38 acre project area would be passed over four times during grading activity.

Demolition - It is estimated that approximately 5,000 square feet of existing wastewater infrastructure will be demolished as part of the project.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

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Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	230.00	90.00
tblConstructionPhase	NumDays	8.00	100.00
tblConstructionPhase	PhaseEndDate	4/30/2020	8/7/2020
tblConstructionPhase	PhaseEndDate	4/30/2020	9/3/2020
tblConstructionPhase	PhaseEndDate	4/30/2020	5/28/2020
tblConstructionPhase	PhaseEndDate	4/30/2020	9/17/2020
tblConstructionPhase	PhaseEndDate	4/30/2020	7/24/2020
tblConstructionPhase	PhaseEndDate	4/30/2020	5/7/2020
tblConstructionPhase	PhaseStartDate	5/1/2020	7/15/2020
tblConstructionPhase	PhaseStartDate	5/1/2020	7/1/2020
tblGrading	AcresOfGrading	50.00	17.50
tblGrading	MaterialExported	0.00	160.00
tblGrading	MaterialImported	0.00	325.00
tblProjectCharacteristics	OperationalYear	2018	2020
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

2.0 Emissions Summary

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1449	1.0000e-005	6.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2800e-003	1.2800e-003	0.0000		1.3700e-003
Energy	1.6000e-004	1.4200e-003	1.1900e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		1.7067	1.7067	3.0000e-005	3.0000e-005	1.7168
Mobile	8.8400e-003	0.0793	0.1126	3.2000e-004	0.0187	4.2000e-004	0.0191	5.0200e-003	4.0000e-004	5.4200e-003		32.9954	32.9954	2.2800e-003		33.0524
Total	0.1539	0.0807	0.1144	3.3000e-004	0.0187	5.3000e-004	0.0192	5.0200e-003	5.1000e-004	5.5300e-003		34.7034	34.7034	2.3100e-003	3.0000e-005	34.7706

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	0.1449	1.0000e-005	6.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2800e-003	1.2800e-003	0.0000		1.3700e-003
Energy	1.6000e-004	1.4200e-003	1.1900e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		1.7067	1.7067	3.0000e-005	3.0000e-005	1.7168
Mobile	8.8400e-003	0.0793	0.1126	3.2000e-004	0.0187	4.2000e-004	0.0191	5.0200e-003	4.0000e-004	5.4200e-003		32.9954	32.9954	2.2800e-003		33.0524
Total	0.1539	0.0807	0.1144	3.3000e-004	0.0187	5.3000e-004	0.0192	5.0200e-003	5.1000e-004	5.5300e-003		34.7034	34.7034	2.3100e-003	3.0000e-005	34.7706

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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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	5/1/2020	9/3/2020	5	90	
2	Demolition	Demolition	5/1/2020	5/28/2020	5	20	
3	Grading	Grading	5/1/2020	9/17/2020	5	100	
4	Site Preparation	Site Preparation	5/1/2020	5/7/2020	5	5	
5	Paving	Paving	7/1/2020	7/24/2020	5	18	
6	Architectural Coating	Architectural Coating	7/15/2020	8/7/2020	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 17.5

Acres of Paving: 4.35

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 2,250; Non-Residential Outdoor: 750; Striped Parking Area: 11,369 (Architectural Coating – sqft)

OffRoad Equipment

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading	Excavators	1	8.00	158	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	6.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

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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
Architectural Coating	1	16.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	80.00	31.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	23.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	48.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345

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3.2 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	0.1988	3.8632	1.4619	8.7900e-003	0.1901	0.0208	0.2109	0.0548	0.0198	0.0746		917.1099	917.1099	0.0798		919.1052
Worker	0.9512	0.8085	6.3170	0.0107	1.0218	9.7400e-003	1.0316	0.2710	8.9800e-003	0.2800		1,055.9742	1,055.9742	0.0613		1,057.5062
Total	1.1500	4.6717	7.7789	0.0194	1.2120	0.0305	1.2424	0.3257	0.0288	0.3546		1,973.0841	1,973.0841	0.1411		1,976.6114

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	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345

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3.2 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	0.1988	3.8632	1.4619	8.7900e-003	0.1901	0.0208	0.2109	0.0548	0.0198	0.0746		917.1099	917.1099	0.0798		919.1052
Worker	0.9512	0.8085	6.3170	0.0107	1.0218	9.7400e-003	1.0316	0.2710	8.9800e-003	0.2800		1,055.9742	1,055.9742	0.0613		1,057.5062
Total	1.1500	4.6717	7.7789	0.0194	1.2120	0.0305	1.2424	0.3257	0.0288	0.3546		1,973.0841	1,973.0841	0.1411		1,976.6114

3.3 Demolition - 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					
Fugitive Dust					0.2461	0.0000	0.2461	0.0373	0.0000	0.0373			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536
Total	3.3121	33.2010	21.7532	0.0388	0.2461	1.6587	1.9048	0.0373	1.5419	1.5791		3,747.7049	3,747.7049	1.0580		3,774.1536

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3.3 Demolition - 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	0.0103	0.3334	0.0577	9.5000e-004	0.0202	1.2200e-003	0.0214	5.5300e-003	1.1700e-003	6.7000e-003		99.4846	99.4846	5.3700e-003		99.6188
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	0.1783	0.1516	1.1844	2.0000e-003	0.1916	1.8300e-003	0.1934	0.0508	1.6800e-003	0.0525		197.9952	197.9952	0.0115		198.2824
Total	0.1886	0.4850	1.2422	2.9500e-003	0.2118	3.0500e-003	0.2148	0.0563	2.8500e-003	0.0592		297.4798	297.4798	0.0169		297.9012

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					0.1107	0.0000	0.1107	0.0168	0.0000	0.0168			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
Total	3.3121	33.2010	21.7532	0.0388	0.1107	1.6587	1.7694	0.0168	1.5419	1.5586	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Winter

3.3 Demolition - 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	0.0103	0.3334	0.0577	9.5000e-004	0.0202	1.2200e-003	0.0214	5.5300e-003	1.1700e-003	6.7000e-003		99.4846	99.4846	5.3700e-003		99.6188
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	0.1783	0.1516	1.1844	2.0000e-003	0.1916	1.8300e-003	0.1934	0.0508	1.6800e-003	0.0525		197.9952	197.9952	0.0115		198.2824
Total	0.1886	0.4850	1.2422	2.9500e-003	0.2118	3.0500e-003	0.2148	0.0563	2.8500e-003	0.0592		297.4798	297.4798	0.0169		297.9012

3.4 Grading - 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					
Fugitive Dust					6.2077	0.0000	6.2077	3.3303	0.0000	3.3303			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716		2,872.4851	2,872.4851	0.9290		2,895.7106
Total	2.4288	26.3859	16.0530	0.0297	6.2077	1.2734	7.4811	3.3303	1.1716	4.5018		2,872.4851	2,872.4851	0.9290		2,895.7106

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Winter

3.4 Grading - 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	4.2800e-003	0.1392	0.0241	4.0000e-004	8.4200e-003	5.1000e-004	8.9200e-003	2.3100e-003	4.9000e-004	2.8000e-003		41.5240	41.5240	2.2400e-003		41.5800
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	0.1783	0.1516	1.1844	2.0000e-003	0.1916	1.8300e-003	0.1934	0.0508	1.6800e-003	0.0525		197.9952	197.9952	0.0115		198.2824
Total	0.1826	0.2908	1.2085	2.4000e-003	0.2000	2.3400e-003	0.2023	0.0531	2.1700e-003	0.0553		239.5192	239.5192	0.0137		239.8624

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					2.7935	0.0000	2.7935	1.4986	0.0000	1.4986			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716	0.0000	2,872.4851	2,872.4851	0.9290		2,895.7106
Total	2.4288	26.3859	16.0530	0.0297	2.7935	1.2734	4.0669	1.4986	1.1716	2.6702	0.0000	2,872.4851	2,872.4851	0.9290		2,895.7106

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Winter

3.4 Grading - 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	4.2800e-003	0.1392	0.0241	4.0000e-004	8.4200e-003	5.1000e-004	8.9200e-003	2.3100e-003	4.9000e-004	2.8000e-003		41.5240	41.5240	2.2400e-003		41.5800
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	0.1783	0.1516	1.1844	2.0000e-003	0.1916	1.8300e-003	0.1934	0.0508	1.6800e-003	0.0525		197.9952	197.9952	0.0115		198.2824
Total	0.1826	0.2908	1.2085	2.4000e-003	0.2000	2.3400e-003	0.2023	0.0531	2.1700e-003	0.0553		239.5192	239.5192	0.0137		239.8624

3.5 Site Preparation - 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					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	18.0663	2.1974	20.2637	9.9307	2.0216	11.9523		3,685.1016	3,685.1016	1.1918		3,714.8975

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3.5 Site Preparation - 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	0.0000	0.0000	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	0.2140	0.1819	1.4213	2.4000e-003	0.2299	2.1900e-003	0.2321	0.0610	2.0200e-003	0.0630		237.5942	237.5942	0.0138		237.9389
Total	0.2140	0.1819	1.4213	2.4000e-003	0.2299	2.1900e-003	0.2321	0.0610	2.0200e-003	0.0630		237.5942	237.5942	0.0138		237.9389

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					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	8.1298	2.1974	10.3272	4.4688	2.0216	6.4904	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Winter

3.5 Site Preparation - 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	0.0000	0.0000	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	0.2140	0.1819	1.4213	2.4000e-003	0.2299	2.1900e-003	0.2321	0.0610	2.0200e-003	0.0630		237.5942	237.5942	0.0138		237.9389
Total	0.2140	0.1819	1.4213	2.4000e-003	0.2299	2.1900e-003	0.2321	0.0610	2.0200e-003	0.0630		237.5942	237.5942	0.0138		237.9389

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1837	11.8015	12.2823	0.0189		0.6509	0.6509		0.6005	0.6005		1,804.7070	1,804.7070	0.5670		1,818.8830
Paving	0.0364					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2201	11.8015	12.2823	0.0189		0.6509	0.6509		0.6005	0.6005		1,804.7070	1,804.7070	0.5670		1,818.8830

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Winter

3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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	0.2378	0.2021	1.5793	2.6600e-003	0.2555	2.4300e-003	0.2579	0.0678	2.2400e-003	0.0700		263.9935	263.9935	0.0153		264.3765
Total	0.2378	0.2021	1.5793	2.6600e-003	0.2555	2.4300e-003	0.2579	0.0678	2.2400e-003	0.0700		263.9935	263.9935	0.0153		264.3765

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	1.1837	11.8015	12.2823	0.0189		0.6509	0.6509		0.6005	0.6005	0.0000	1,804.7070	1,804.7070	0.5670		1,818.8830
Paving	0.0364					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2201	11.8015	12.2823	0.0189		0.6509	0.6509		0.6005	0.6005	0.0000	1,804.7070	1,804.7070	0.5670		1,818.8830

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Winter

3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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	0.2378	0.2021	1.5793	2.6600e-003	0.2555	2.4300e-003	0.2579	0.0678	2.2400e-003	0.0700		263.9935	263.9935	0.0153		264.3765
Total	0.2378	0.2021	1.5793	2.6600e-003	0.2555	2.4300e-003	0.2579	0.0678	2.2400e-003	0.0700		263.9935	263.9935	0.0153		264.3765

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.2500					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	9.4922	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Winter

3.7 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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	0.1902	0.1617	1.2634	2.1300e-003	0.2044	1.9500e-003	0.2063	0.0542	1.8000e-003	0.0560		211.1948	211.1948	0.0123		211.5012
Total	0.1902	0.1617	1.2634	2.1300e-003	0.2044	1.9500e-003	0.2063	0.0542	1.8000e-003	0.0560		211.1948	211.1948	0.0123		211.5012

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	9.2500					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	9.4922	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

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Winter

3.7 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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	0.1902	0.1617	1.2634	2.1300e-003	0.2044	1.9500e-003	0.2063	0.0542	1.8000e-003	0.0560		211.1948	211.1948	0.0123		211.5012
Total	0.1902	0.1617	1.2634	2.1300e-003	0.2044	1.9500e-003	0.2063	0.0542	1.8000e-003	0.0560		211.1948	211.1948	0.0123		211.5012

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.8400e-003	0.0793	0.1126	3.2000e-004	0.0187	4.2000e-004	0.0191	5.0200e-003	4.0000e-004	5.4200e-003		32.9954	32.9954	2.2800e-003		33.0524
Unmitigated	8.8400e-003	0.0793	0.1126	3.2000e-004	0.0187	4.2000e-004	0.0191	5.0200e-003	4.0000e-004	5.4200e-003		32.9954	32.9954	2.2800e-003		33.0524

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Heavy Industry	2.25	2.25	2.25	8,693	8,693
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	2.25	2.25	2.25	8,693	8,693

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
General Heavy Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Heavy Industry	0.480138	0.040615	0.180049	0.120387	0.037372	0.006792	0.008746	0.115531	0.001256	0.001655	0.005192	0.001016	0.001248
Other Non-Asphalt Surfaces	0.480138	0.040615	0.180049	0.120387	0.037372	0.006792	0.008746	0.115531	0.001256	0.001655	0.005192	0.001016	0.001248
Other Asphalt Surfaces	0.480138	0.040615	0.180049	0.120387	0.037372	0.006792	0.008746	0.115531	0.001256	0.001655	0.005192	0.001016	0.001248

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.6000e-004	1.4200e-003	1.1900e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		1.7067	1.7067	3.0000e-005	3.0000e-005	1.7168
NaturalGas Unmitigated	1.6000e-004	1.4200e-003	1.1900e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		1.7067	1.7067	3.0000e-005	3.0000e-005	1.7168

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Winter

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas 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					
General Heavy Industry	14.5068	1.6000e-004	1.4200e-003	1.1900e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		1.7067	1.7067	3.0000e-005	3.0000e-005	1.7168
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		1.6000e-004	1.4200e-003	1.1900e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		1.7067	1.7067	3.0000e-005	3.0000e-005	1.7168

Mitigated

	Natural Gas 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					
General Heavy Industry	0.0145068	1.6000e-004	1.4200e-003	1.1900e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		1.7067	1.7067	3.0000e-005	3.0000e-005	1.7168
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		1.6000e-004	1.4200e-003	1.1900e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		1.7067	1.7067	3.0000e-005	3.0000e-005	1.7168

6.0 Area Detail

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Winter

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1449	1.0000e-005	6.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2800e-003	1.2800e-003	0.0000		1.3700e-003
Unmitigated	0.1449	1.0000e-005	6.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2800e-003	1.2800e-003	0.0000		1.3700e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0456					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0992					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0000e-005	1.0000e-005	6.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2800e-003	1.2800e-003	0.0000		1.3700e-003
Total	0.1449	1.0000e-005	6.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2800e-003	1.2800e-003	0.0000		1.3700e-003

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0456					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0992					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0000e-005	1.0000e-005	6.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2800e-003	1.2800e-003	0.0000		1.3700e-003
Total	0.1449	1.0000e-005	6.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2800e-003	1.2800e-003	0.0000		1.3700e-003

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

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Winter

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

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Summer

Lake Shastina CSD Wastewater Improvement Project
Siskiyou County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	1.50	1000sqft	0.03	1,500.00	0
Other Non-Asphalt Surfaces	4.10	Acre	4.10	178,596.00	0
Other Asphalt Surfaces	0.25	Acre	0.25	10,890.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	85
Climate Zone	14			Operational Year	2020
Utility Company	PacifiCorp				
CO2 Intensity (lb/MWhr)	1656.39	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Summer

Project Characteristics - Start of Construction and Operational Year per project construction schedule.

Land Use - Other Non-Asphalt Surfaces land use subtype was used for the wastewater ponds and some of the utility infrastructure improvements. Other Asphalt Surfaces land use subtype was used for the new sewer force main along Lake Shore Drive and a portion of the sewer line off of Tony Lema Drive. General Heavy Industry land use subtype was used to obtain estimates of operational emissions for the headworks facility and lift station improvements.

Construction Phase - Construction schedule for Grading and Building Construction phases were modified per project description. The default values were used for all other categories. Construction was conservatively assumed to last for 100 days.

Grading - Estimated that approximately 325 c.y. of material would be imported for the sewer pipeline trenches. Estimated that approximately 160 c.y. of waste material would be exported. Assumed that the approximately 4.38 acre project area would be passed over four times during grading activity.

Demolition - It is estimated that approximately 5,000 square feet of existing wastewater infrastructure will be demolished as part of the project.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Summer

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	230.00	90.00
tblConstructionPhase	NumDays	8.00	100.00
tblConstructionPhase	PhaseEndDate	4/30/2020	8/7/2020
tblConstructionPhase	PhaseEndDate	4/30/2020	9/3/2020
tblConstructionPhase	PhaseEndDate	4/30/2020	5/28/2020
tblConstructionPhase	PhaseEndDate	4/30/2020	9/17/2020
tblConstructionPhase	PhaseEndDate	4/30/2020	7/24/2020
tblConstructionPhase	PhaseEndDate	4/30/2020	5/7/2020
tblConstructionPhase	PhaseStartDate	5/1/2020	7/15/2020
tblConstructionPhase	PhaseStartDate	5/1/2020	7/1/2020
tblGrading	AcresOfGrading	50.00	17.50
tblGrading	MaterialExported	0.00	160.00
tblGrading	MaterialImported	0.00	325.00
tblProjectCharacteristics	OperationalYear	2018	2020
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

2.0 Emissions Summary

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1449	1.0000e-005	6.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2800e-003	1.2800e-003	0.0000		1.3700e-003
Energy	1.6000e-004	1.4200e-003	1.1900e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		1.7067	1.7067	3.0000e-005	3.0000e-005	1.7168
Mobile	8.8600e-003	0.0741	0.0991	3.4000e-004	0.0187	4.1000e-004	0.0191	5.0200e-003	3.9000e-004	5.4100e-003		34.5508	34.5508	2.1100e-003		34.6036
Total	0.1539	0.0755	0.1009	3.5000e-004	0.0187	5.2000e-004	0.0192	5.0200e-003	5.0000e-004	5.5200e-003		36.2587	36.2587	2.1400e-003	3.0000e-005	36.3218

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	0.1449	1.0000e-005	6.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2800e-003	1.2800e-003	0.0000		1.3700e-003
Energy	1.6000e-004	1.4200e-003	1.1900e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		1.7067	1.7067	3.0000e-005	3.0000e-005	1.7168
Mobile	8.8600e-003	0.0741	0.0991	3.4000e-004	0.0187	4.1000e-004	0.0191	5.0200e-003	3.9000e-004	5.4100e-003		34.5508	34.5508	2.1100e-003		34.6036
Total	0.1539	0.0755	0.1009	3.5000e-004	0.0187	5.2000e-004	0.0192	5.0200e-003	5.0000e-004	5.5200e-003		36.2587	36.2587	2.1400e-003	3.0000e-005	36.3218

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Summer

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	5/1/2020	9/3/2020	5	90	
2	Demolition	Demolition	5/1/2020	5/28/2020	5	20	
3	Grading	Grading	5/1/2020	9/17/2020	5	100	
4	Site Preparation	Site Preparation	5/1/2020	5/7/2020	5	5	
5	Paving	Paving	7/1/2020	7/24/2020	5	18	
6	Architectural Coating	Architectural Coating	7/15/2020	8/7/2020	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 17.5

Acres of Paving: 4.35

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 2,250; Non-Residential Outdoor: 750; Striped Parking Area: 11,369 (Architectural Coating – sqft)

OffRoad Equipment

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading	Excavators	1	8.00	158	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	6.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	16.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	80.00	31.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	23.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	48.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Summer

3.2 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	0.1805	3.7945	1.1295	9.1800e-003	0.1901	0.0201	0.2102	0.0548	0.0192	0.0740		958.5824	958.5824	0.0703		960.3401
Worker	0.8004	0.5624	5.8212	0.0112	1.0218	9.7400e-003	1.0316	0.2710	8.9800e-003	0.2800		1,112.3341	1,112.3341	0.0613		1,113.8668
Total	0.9810	4.3569	6.9506	0.0204	1.2120	0.0298	1.2418	0.3257	0.0282	0.3539		2,070.9165	2,070.9165	0.1316		2,074.2070

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	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Summer

3.2 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	0.1805	3.7945	1.1295	9.1800e-003	0.1901	0.0201	0.2102	0.0548	0.0192	0.0740		958.5824	958.5824	0.0703		960.3401
Worker	0.8004	0.5624	5.8212	0.0112	1.0218	9.7400e-003	1.0316	0.2710	8.9800e-003	0.2800		1,112.3341	1,112.3341	0.0613		1,113.8668
Total	0.9810	4.3569	6.9506	0.0204	1.2120	0.0298	1.2418	0.3257	0.0282	0.3539		2,070.9165	2,070.9165	0.1316		2,074.2070

3.3 Demolition - 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					
Fugitive Dust					0.2461	0.0000	0.2461	0.0373	0.0000	0.0373			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536
Total	3.3121	33.2010	21.7532	0.0388	0.2461	1.6587	1.9048	0.0373	1.5419	1.5791		3,747.7049	3,747.7049	1.0580		3,774.1536

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Summer

3.3 Demolition - 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	9.7800e-003	0.3241	0.0485	9.8000e-004	0.0202	1.1800e-003	0.0213	5.5300e-003	1.1300e-003	6.6600e-003		102.5174	102.5174	4.7100e-003		102.6351
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	0.1501	0.1054	1.0915	2.1000e-003	0.1916	1.8300e-003	0.1934	0.0508	1.6800e-003	0.0525		208.5627	208.5627	0.0115		208.8500
Total	0.1599	0.4296	1.1400	3.0800e-003	0.2118	3.0100e-003	0.2148	0.0563	2.8100e-003	0.0592		311.0800	311.0800	0.0162		311.4852

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					0.1107	0.0000	0.1107	0.0168	0.0000	0.0168			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
Total	3.3121	33.2010	21.7532	0.0388	0.1107	1.6587	1.7694	0.0168	1.5419	1.5586	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Summer

3.3 Demolition - 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	9.7800e-003	0.3241	0.0485	9.8000e-004	0.0202	1.1800e-003	0.0213	5.5300e-003	1.1300e-003	6.6600e-003		102.5174	102.5174	4.7100e-003		102.6351
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	0.1501	0.1054	1.0915	2.1000e-003	0.1916	1.8300e-003	0.1934	0.0508	1.6800e-003	0.0525		208.5627	208.5627	0.0115		208.8500
Total	0.1599	0.4296	1.1400	3.0800e-003	0.2118	3.0100e-003	0.2148	0.0563	2.8100e-003	0.0592		311.0800	311.0800	0.0162		311.4852

3.4 Grading - 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					
Fugitive Dust					6.2077	0.0000	6.2077	3.3303	0.0000	3.3303			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716		2,872.4851	2,872.4851	0.9290		2,895.7106
Total	2.4288	26.3859	16.0530	0.0297	6.2077	1.2734	7.4811	3.3303	1.1716	4.5018		2,872.4851	2,872.4851	0.9290		2,895.7106

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Summer

3.4 Grading - 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	4.0800e-003	0.1353	0.0202	4.1000e-004	8.4200e-003	4.9000e-004	8.9100e-003	2.3100e-003	4.7000e-004	2.7800e-003		42.7899	42.7899	1.9700e-003		42.8390
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	0.1501	0.1054	1.0915	2.1000e-003	0.1916	1.8300e-003	0.1934	0.0508	1.6800e-003	0.0525		208.5627	208.5627	0.0115		208.8500
Total	0.1542	0.2407	1.1117	2.5100e-003	0.2000	2.3200e-003	0.2023	0.0531	2.1500e-003	0.0553		251.3525	251.3525	0.0135		251.6890

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					2.7935	0.0000	2.7935	1.4986	0.0000	1.4986			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716	0.0000	2,872.4851	2,872.4851	0.9290		2,895.7106
Total	2.4288	26.3859	16.0530	0.0297	2.7935	1.2734	4.0669	1.4986	1.1716	2.6702	0.0000	2,872.4851	2,872.4851	0.9290		2,895.7106

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Summer

3.4 Grading - 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	4.0800e-003	0.1353	0.0202	4.1000e-004	8.4200e-003	4.9000e-004	8.9100e-003	2.3100e-003	4.7000e-004	2.7800e-003		42.7899	42.7899	1.9700e-003		42.8390
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	0.1501	0.1054	1.0915	2.1000e-003	0.1916	1.8300e-003	0.1934	0.0508	1.6800e-003	0.0525		208.5627	208.5627	0.0115		208.8500
Total	0.1542	0.2407	1.1117	2.5100e-003	0.2000	2.3200e-003	0.2023	0.0531	2.1500e-003	0.0553		251.3525	251.3525	0.0135		251.6890

3.5 Site Preparation - 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					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	18.0663	2.1974	20.2637	9.9307	2.0216	11.9523		3,685.1016	3,685.1016	1.1918		3,714.8975

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Summer

3.5 Site Preparation - 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	0.0000	0.0000	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	0.1801	0.1265	1.3098	2.5200e-003	0.2299	2.1900e-003	0.2321	0.0610	2.0200e-003	0.0630		250.2752	250.2752	0.0138		250.6200
Total	0.1801	0.1265	1.3098	2.5200e-003	0.2299	2.1900e-003	0.2321	0.0610	2.0200e-003	0.0630		250.2752	250.2752	0.0138		250.6200

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					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	8.1298	2.1974	10.3272	4.4688	2.0216	6.4904	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Summer

3.5 Site Preparation - 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	0.0000	0.0000	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	0.1801	0.1265	1.3098	2.5200e-003	0.2299	2.1900e-003	0.2321	0.0610	2.0200e-003	0.0630		250.2752	250.2752	0.0138		250.6200
Total	0.1801	0.1265	1.3098	2.5200e-003	0.2299	2.1900e-003	0.2321	0.0610	2.0200e-003	0.0630		250.2752	250.2752	0.0138		250.6200

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1837	11.8015	12.2823	0.0189		0.6509	0.6509		0.6005	0.6005		1,804.7070	1,804.7070	0.5670		1,818.8830
Paving	0.0364					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2201	11.8015	12.2823	0.0189		0.6509	0.6509		0.6005	0.6005		1,804.7070	1,804.7070	0.5670		1,818.8830

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Summer

3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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	0.2001	0.1406	1.4553	2.8000e-003	0.2555	2.4300e-003	0.2579	0.0678	2.2400e-003	0.0700		278.0835	278.0835	0.0153		278.4667
Total	0.2001	0.1406	1.4553	2.8000e-003	0.2555	2.4300e-003	0.2579	0.0678	2.2400e-003	0.0700		278.0835	278.0835	0.0153		278.4667

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	1.1837	11.8015	12.2823	0.0189		0.6509	0.6509		0.6005	0.6005	0.0000	1,804.7070	1,804.7070	0.5670		1,818.8830
Paving	0.0364					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2201	11.8015	12.2823	0.0189		0.6509	0.6509		0.6005	0.6005	0.0000	1,804.7070	1,804.7070	0.5670		1,818.8830

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Summer

3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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	0.2001	0.1406	1.4553	2.8000e-003	0.2555	2.4300e-003	0.2579	0.0678	2.2400e-003	0.0700		278.0835	278.0835	0.0153		278.4667
Total	0.2001	0.1406	1.4553	2.8000e-003	0.2555	2.4300e-003	0.2579	0.0678	2.2400e-003	0.0700		278.0835	278.0835	0.0153		278.4667

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.2500					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	9.4922	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Summer

3.7 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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	0.1601	0.1125	1.1642	2.2400e-003	0.2044	1.9500e-003	0.2063	0.0542	1.8000e-003	0.0560		222.4668	222.4668	0.0123		222.7734
Total	0.1601	0.1125	1.1642	2.2400e-003	0.2044	1.9500e-003	0.2063	0.0542	1.8000e-003	0.0560		222.4668	222.4668	0.0123		222.7734

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	9.2500					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	9.4922	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

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Summer

3.7 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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	0.1601	0.1125	1.1642	2.2400e-003	0.2044	1.9500e-003	0.2063	0.0542	1.8000e-003	0.0560		222.4668	222.4668	0.0123		222.7734
Total	0.1601	0.1125	1.1642	2.2400e-003	0.2044	1.9500e-003	0.2063	0.0542	1.8000e-003	0.0560		222.4668	222.4668	0.0123		222.7734

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.8600e-003	0.0741	0.0991	3.4000e-004	0.0187	4.1000e-004	0.0191	5.0200e-003	3.9000e-004	5.4100e-003		34.5508	34.5508	2.1100e-003		34.6036
Unmitigated	8.8600e-003	0.0741	0.0991	3.4000e-004	0.0187	4.1000e-004	0.0191	5.0200e-003	3.9000e-004	5.4100e-003		34.5508	34.5508	2.1100e-003		34.6036

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Heavy Industry	2.25	2.25	2.25	8,693	8,693
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	2.25	2.25	2.25	8,693	8,693

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
General Heavy Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Heavy Industry	0.480138	0.040615	0.180049	0.120387	0.037372	0.006792	0.008746	0.115531	0.001256	0.001655	0.005192	0.001016	0.001248
Other Non-Asphalt Surfaces	0.480138	0.040615	0.180049	0.120387	0.037372	0.006792	0.008746	0.115531	0.001256	0.001655	0.005192	0.001016	0.001248
Other Asphalt Surfaces	0.480138	0.040615	0.180049	0.120387	0.037372	0.006792	0.008746	0.115531	0.001256	0.001655	0.005192	0.001016	0.001248

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.6000e-004	1.4200e-003	1.1900e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		1.7067	1.7067	3.0000e-005	3.0000e-005	1.7168
NaturalGas Unmitigated	1.6000e-004	1.4200e-003	1.1900e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		1.7067	1.7067	3.0000e-005	3.0000e-005	1.7168

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Summer

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas 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					
General Heavy Industry	14.5068	1.6000e-004	1.4200e-003	1.1900e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		1.7067	1.7067	3.0000e-005	3.0000e-005	1.7168
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		1.6000e-004	1.4200e-003	1.1900e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		1.7067	1.7067	3.0000e-005	3.0000e-005	1.7168

Mitigated

	Natural Gas 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					
General Heavy Industry	0.0145068	1.6000e-004	1.4200e-003	1.1900e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		1.7067	1.7067	3.0000e-005	3.0000e-005	1.7168
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		1.6000e-004	1.4200e-003	1.1900e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		1.7067	1.7067	3.0000e-005	3.0000e-005	1.7168

6.0 Area Detail

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Summer

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1449	1.0000e-005	6.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2800e-003	1.2800e-003	0.0000		1.3700e-003
Unmitigated	0.1449	1.0000e-005	6.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2800e-003	1.2800e-003	0.0000		1.3700e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0456					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0992					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0000e-005	1.0000e-005	6.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2800e-003	1.2800e-003	0.0000		1.3700e-003
Total	0.1449	1.0000e-005	6.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2800e-003	1.2800e-003	0.0000		1.3700e-003

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0456					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0992					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0000e-005	1.0000e-005	6.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2800e-003	1.2800e-003	0.0000		1.3700e-003
Total	0.1449	1.0000e-005	6.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2800e-003	1.2800e-003	0.0000		1.3700e-003

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

Lake Shastina CSD Wastewater Improvement Project - Siskiyou 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

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Annual

Lake Shastina CSD Wastewater Improvement Project
Siskiyou County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	1.50	1000sqft	0.03	1,500.00	0
Other Non-Asphalt Surfaces	4.10	Acre	4.10	178,596.00	0
Other Asphalt Surfaces	0.25	Acre	0.25	10,890.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	85
Climate Zone	14			Operational Year	2020
Utility Company	PacifiCorp				
CO2 Intensity (lb/MWhr)	1656.39	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Annual

Project Characteristics - Start of Construction and Operational Year per project construction schedule.

Land Use - Other Non-Asphalt Surfaces land use subtype was used for the wastewater ponds and some of the utility infrastructure improvements. Other Asphalt Surfaces land use subtype was used for the new sewer force main along Lake Shore Drive and a portion of the sewer line off of Tony Lema Drive. General Heavy Industry land use subtype was used to obtain estimates of operational emissions for the headworks facility and lift station improvements.

Construction Phase - Construction schedule for Grading and Building Construction phases were modified per project description. The default values were used for all other categories. Construction was conservatively assumed to last for 100 days.

Grading - Estimated that approximately 325 c.y. of material would be imported for the sewer pipeline trenches. Estimated that approximately 160 c.y. of waste material would be exported. Assumed that the approximately 4.38 acre project area would be passed over four times during grading activity.

Demolition - It is estimated that approximately 5,000 square feet of existing wastewater infrastructure will be demolished as part of the project.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Annual

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	230.00	90.00
tblConstructionPhase	NumDays	8.00	100.00
tblConstructionPhase	PhaseEndDate	4/30/2020	8/7/2020
tblConstructionPhase	PhaseEndDate	4/30/2020	9/3/2020
tblConstructionPhase	PhaseEndDate	4/30/2020	5/28/2020
tblConstructionPhase	PhaseEndDate	4/30/2020	9/17/2020
tblConstructionPhase	PhaseEndDate	4/30/2020	7/24/2020
tblConstructionPhase	PhaseEndDate	4/30/2020	5/7/2020
tblConstructionPhase	PhaseStartDate	5/1/2020	7/15/2020
tblConstructionPhase	PhaseStartDate	5/1/2020	7/1/2020
tblGrading	AcresOfGrading	50.00	17.50
tblGrading	MaterialExported	0.00	160.00
tblGrading	MaterialImported	0.00	325.00
tblProjectCharacteristics	OperationalYear	2018	2020
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

2.0 Emissions Summary

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	5-1-2020	7-31-2020	2.5072	2.5072
2	8-1-2020	9-30-2020	0.8529	0.8529
		Highest	2.5072	2.5072

2.2 Overall Operational
Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0264	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.1000e-004
Energy	3.0000e-005	2.6000e-004	2.2000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	5.1962	5.1962	9.0000e-005	2.0000e-005	5.2054
Mobile	1.5800e-003	0.0139	0.0190	6.0000e-005	3.2400e-003	8.0000e-005	3.3100e-003	8.7000e-004	7.0000e-005	9.4000e-004	0.0000	5.5433	5.5433	3.6000e-004	0.0000	5.5523
Waste						0.0000	0.0000		0.0000	0.0000	0.3776	0.0000	0.3776	0.0223	0.0000	0.9354
Water						0.0000	0.0000		0.0000	0.0000	0.1101	1.4102	1.5202	0.0113	2.7000e-004	1.8845
Total	0.0281	0.0141	0.0192	6.0000e-005	3.2400e-003	1.0000e-004	3.3300e-003	8.7000e-004	9.0000e-005	9.6000e-004	0.4876	12.1498	12.6375	0.0341	2.9000e-004	13.5777

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0264	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.1000e-004
Energy	3.0000e-005	2.6000e-004	2.2000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	5.1962	5.1962	9.0000e-005	2.0000e-005	5.2054
Mobile	1.5800e-003	0.0139	0.0190	6.0000e-005	3.2400e-003	8.0000e-005	3.3100e-003	8.7000e-004	7.0000e-005	9.4000e-004	0.0000	5.5433	5.5433	3.6000e-004	0.0000	5.5523
Waste						0.0000	0.0000		0.0000	0.0000	0.3776	0.0000	0.3776	0.0223	0.0000	0.9354
Water						0.0000	0.0000		0.0000	0.0000	0.1101	1.4102	1.5202	0.0113	2.7000e-004	1.8845
Total	0.0281	0.0141	0.0192	6.0000e-005	3.2400e-003	1.0000e-004	3.3300e-003	8.7000e-004	9.0000e-005	9.6000e-004	0.4876	12.1498	12.6375	0.0341	2.9000e-004	13.5777

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

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	5/1/2020	9/3/2020	5	90	
2	Demolition	Demolition	5/1/2020	5/28/2020	5	20	
3	Grading	Grading	5/1/2020	9/17/2020	5	100	
4	Site Preparation	Site Preparation	5/1/2020	5/7/2020	5	5	
5	Paving	Paving	7/1/2020	7/24/2020	5	18	
6	Architectural Coating	Architectural Coating	7/15/2020	8/7/2020	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 17.5

Acres of Paving: 4.35

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 2,250; Non-Residential Outdoor: 750; Striped Parking Area: 11,369 (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
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading	Excavators	1	8.00	158	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	6.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

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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
Architectural Coating	1	16.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	80.00	31.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	23.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	48.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0954	0.8634	0.7582	1.2100e-003		0.0503	0.0503		0.0473	0.0473	0.0000	104.2245	104.2245	0.0254	0.0000	104.8602
Total	0.0954	0.8634	0.7582	1.2100e-003		0.0503	0.0503		0.0473	0.0473	0.0000	104.2245	104.2245	0.0254	0.0000	104.8602

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3.2 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.4800e-003	0.1719	0.0578	4.1000e-004	8.2000e-003	9.2000e-004	9.1200e-003	2.3800e-003	8.8000e-004	3.2500e-003	0.0000	38.4207	38.4207	3.0400e-003	0.0000	38.4967
Worker	0.0382	0.0303	0.2679	4.9000e-004	0.0437	4.4000e-004	0.0441	0.0116	4.0000e-004	0.0120	0.0000	43.6917	43.6917	2.4700e-003	0.0000	43.7535
Total	0.0467	0.2022	0.3257	9.0000e-004	0.0519	1.3600e-003	0.0532	0.0140	1.2800e-003	0.0153	0.0000	82.1124	82.1124	5.5100e-003	0.0000	82.2501

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0954	0.8634	0.7582	1.2100e-003		0.0503	0.0503		0.0473	0.0473	0.0000	104.2244	104.2244	0.0254	0.0000	104.8601
Total	0.0954	0.8634	0.7582	1.2100e-003		0.0503	0.0503		0.0473	0.0473	0.0000	104.2244	104.2244	0.0254	0.0000	104.8601

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3.2 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.4800e-003	0.1719	0.0578	4.1000e-004	8.2000e-003	9.2000e-004	9.1200e-003	2.3800e-003	8.8000e-004	3.2500e-003	0.0000	38.4207	38.4207	3.0400e-003	0.0000	38.4967
Worker	0.0382	0.0303	0.2679	4.9000e-004	0.0437	4.4000e-004	0.0441	0.0116	4.0000e-004	0.0120	0.0000	43.6917	43.6917	2.4700e-003	0.0000	43.7535
Total	0.0467	0.2022	0.3257	9.0000e-004	0.0519	1.3600e-003	0.0532	0.0140	1.2800e-003	0.0153	0.0000	82.1124	82.1124	5.5100e-003	0.0000	82.2501

3.3 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.4600e-003	0.0000	2.4600e-003	3.7000e-004	0.0000	3.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2386
Total	0.0331	0.3320	0.2175	3.9000e-004	2.4600e-003	0.0166	0.0191	3.7000e-004	0.0154	0.0158	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2386

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3.3 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-004	3.2700e-003	5.2000e-004	1.0000e-005	1.9000e-004	1.0000e-005	2.0000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.9185	0.9185	5.0000e-005	0.0000	0.9196
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5900e-003	1.2600e-003	0.0112	2.0000e-005	1.8200e-003	2.0000e-005	1.8400e-003	4.8000e-004	2.0000e-005	5.0000e-004	0.0000	1.8205	1.8205	1.0000e-004	0.0000	1.8231
Total	1.6900e-003	4.5300e-003	0.0117	3.0000e-005	2.0100e-003	3.0000e-005	2.0400e-003	5.3000e-004	3.0000e-005	5.6000e-004	0.0000	2.7390	2.7390	1.5000e-004	0.0000	2.7427

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.1100e-003	0.0000	1.1100e-003	1.7000e-004	0.0000	1.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2385
Total	0.0331	0.3320	0.2175	3.9000e-004	1.1100e-003	0.0166	0.0177	1.7000e-004	0.0154	0.0156	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2385

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3.3 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-004	3.2700e-003	5.2000e-004	1.0000e-005	1.9000e-004	1.0000e-005	2.0000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.9185	0.9185	5.0000e-005	0.0000	0.9196
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5900e-003	1.2600e-003	0.0112	2.0000e-005	1.8200e-003	2.0000e-005	1.8400e-003	4.8000e-004	2.0000e-005	5.0000e-004	0.0000	1.8205	1.8205	1.0000e-004	0.0000	1.8231
Total	1.6900e-003	4.5300e-003	0.0117	3.0000e-005	2.0100e-003	3.0000e-005	2.0400e-003	5.3000e-004	3.0000e-005	5.6000e-004	0.0000	2.7390	2.7390	1.5000e-004	0.0000	2.7427

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3104	0.0000	0.3104	0.1665	0.0000	0.1665	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1214	1.3193	0.8027	1.4800e-003		0.0637	0.0637		0.0586	0.0586	0.0000	130.2937	130.2937	0.0421	0.0000	131.3472
Total	0.1214	1.3193	0.8027	1.4800e-003	0.3104	0.0637	0.3741	0.1665	0.0586	0.2251	0.0000	130.2937	130.2937	0.0421	0.0000	131.3472

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3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.1000e-004	6.8200e-003	1.0900e-003	2.0000e-005	4.0000e-004	3.0000e-005	4.3000e-004	1.1000e-004	2.0000e-005	1.3000e-004	0.0000	1.9168	1.9168	9.0000e-005	0.0000	1.9192
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.9600e-003	6.3200e-003	0.0558	1.0000e-004	9.0900e-003	9.0000e-005	9.1900e-003	2.4200e-003	8.0000e-005	2.5100e-003	0.0000	9.1024	9.1024	5.1000e-004	0.0000	9.1153
Total	8.1700e-003	0.0131	0.0569	1.2000e-004	9.4900e-003	1.2000e-004	9.6200e-003	2.5300e-003	1.0000e-004	2.6400e-003	0.0000	11.0192	11.0192	6.0000e-004	0.0000	11.0345

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1397	0.0000	0.1397	0.0749	0.0000	0.0749	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1214	1.3193	0.8027	1.4800e-003		0.0637	0.0637		0.0586	0.0586	0.0000	130.2936	130.2936	0.0421	0.0000	131.3471
Total	0.1214	1.3193	0.8027	1.4800e-003	0.1397	0.0637	0.2033	0.0749	0.0586	0.1335	0.0000	130.2936	130.2936	0.0421	0.0000	131.3471

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3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.1000e-004	6.8200e-003	1.0900e-003	2.0000e-005	4.0000e-004	3.0000e-005	4.3000e-004	1.1000e-004	2.0000e-005	1.3000e-004	0.0000	1.9168	1.9168	9.0000e-005	0.0000	1.9192
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.9600e-003	6.3200e-003	0.0558	1.0000e-004	9.0900e-003	9.0000e-005	9.1900e-003	2.4200e-003	8.0000e-005	2.5100e-003	0.0000	9.1024	9.1024	5.1000e-004	0.0000	9.1153
Total	8.1700e-003	0.0131	0.0569	1.2000e-004	9.4900e-003	1.2000e-004	9.6200e-003	2.5300e-003	1.0000e-004	2.6400e-003	0.0000	11.0192	11.0192	6.0000e-004	0.0000	11.0345

3.5 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0102	0.1060	0.0538	1.0000e-004		5.4900e-003	5.4900e-003		5.0500e-003	5.0500e-003	0.0000	8.3577	8.3577	2.7000e-003	0.0000	8.4253
Total	0.0102	0.1060	0.0538	1.0000e-004	0.0452	5.4900e-003	0.0507	0.0248	5.0500e-003	0.0299	0.0000	8.3577	8.3577	2.7000e-003	0.0000	8.4253

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3.5 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8000e-004	3.8000e-004	3.3500e-003	1.0000e-005	5.5000e-004	1.0000e-005	5.5000e-004	1.5000e-004	1.0000e-005	1.5000e-004	0.0000	0.5462	0.5462	3.0000e-005	0.0000	0.5469
Total	4.8000e-004	3.8000e-004	3.3500e-003	1.0000e-005	5.5000e-004	1.0000e-005	5.5000e-004	1.5000e-004	1.0000e-005	1.5000e-004	0.0000	0.5462	0.5462	3.0000e-005	0.0000	0.5469

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0203	0.0000	0.0203	0.0112	0.0000	0.0112	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0102	0.1060	0.0538	1.0000e-004		5.4900e-003	5.4900e-003		5.0500e-003	5.0500e-003	0.0000	8.3577	8.3577	2.7000e-003	0.0000	8.4252
Total	0.0102	0.1060	0.0538	1.0000e-004	0.0203	5.4900e-003	0.0258	0.0112	5.0500e-003	0.0162	0.0000	8.3577	8.3577	2.7000e-003	0.0000	8.4252

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3.5 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8000e-004	3.8000e-004	3.3500e-003	1.0000e-005	5.5000e-004	1.0000e-005	5.5000e-004	1.5000e-004	1.0000e-005	1.5000e-004	0.0000	0.5462	0.5462	3.0000e-005	0.0000	0.5469
Total	4.8000e-004	3.8000e-004	3.3500e-003	1.0000e-005	5.5000e-004	1.0000e-005	5.5000e-004	1.5000e-004	1.0000e-005	1.5000e-004	0.0000	0.5462	0.5462	3.0000e-005	0.0000	0.5469

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0107	0.1062	0.1105	1.7000e-004		5.8600e-003	5.8600e-003		5.4000e-003	5.4000e-003	0.0000	14.7348	14.7348	4.6300e-003	0.0000	14.8506
Paving	3.3000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0110	0.1062	0.1105	1.7000e-004		5.8600e-003	5.8600e-003		5.4000e-003	5.4000e-003	0.0000	14.7348	14.7348	4.6300e-003	0.0000	14.8506

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3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9100e-003	1.5200e-003	0.0134	2.0000e-005	2.1800e-003	2.0000e-005	2.2000e-003	5.8000e-004	2.0000e-005	6.0000e-004	0.0000	2.1846	2.1846	1.2000e-004	0.0000	2.1877
Total	1.9100e-003	1.5200e-003	0.0134	2.0000e-005	2.1800e-003	2.0000e-005	2.2000e-003	5.8000e-004	2.0000e-005	6.0000e-004	0.0000	2.1846	2.1846	1.2000e-004	0.0000	2.1877

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0107	0.1062	0.1105	1.7000e-004		5.8600e-003	5.8600e-003		5.4000e-003	5.4000e-003	0.0000	14.7348	14.7348	4.6300e-003	0.0000	14.8506
Paving	3.3000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0110	0.1062	0.1105	1.7000e-004		5.8600e-003	5.8600e-003		5.4000e-003	5.4000e-003	0.0000	14.7348	14.7348	4.6300e-003	0.0000	14.8506

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3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9100e-003	1.5200e-003	0.0134	2.0000e-005	2.1800e-003	2.0000e-005	2.2000e-003	5.8000e-004	2.0000e-005	6.0000e-004	0.0000	2.1846	2.1846	1.2000e-004	0.0000	2.1877
Total	1.9100e-003	1.5200e-003	0.0134	2.0000e-005	2.1800e-003	2.0000e-005	2.2000e-003	5.8000e-004	2.0000e-005	6.0000e-004	0.0000	2.1846	2.1846	1.2000e-004	0.0000	2.1877

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0833					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1800e-003	0.0152	0.0165	3.0000e-005		1.0000e-003	1.0000e-003		1.0000e-003	1.0000e-003	0.0000	2.2979	2.2979	1.8000e-004	0.0000	2.3024
Total	0.0854	0.0152	0.0165	3.0000e-005		1.0000e-003	1.0000e-003		1.0000e-003	1.0000e-003	0.0000	2.2979	2.2979	1.8000e-004	0.0000	2.3024

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3.7 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5300e-003	1.2100e-003	0.0107	2.0000e-005	1.7500e-003	2.0000e-005	1.7600e-003	4.6000e-004	2.0000e-005	4.8000e-004	0.0000	1.7477	1.7477	1.0000e-004	0.0000	1.7501
Total	1.5300e-003	1.2100e-003	0.0107	2.0000e-005	1.7500e-003	2.0000e-005	1.7600e-003	4.6000e-004	2.0000e-005	4.8000e-004	0.0000	1.7477	1.7477	1.0000e-004	0.0000	1.7501

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0833					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1800e-003	0.0152	0.0165	3.0000e-005		1.0000e-003	1.0000e-003		1.0000e-003	1.0000e-003	0.0000	2.2979	2.2979	1.8000e-004	0.0000	2.3024
Total	0.0854	0.0152	0.0165	3.0000e-005		1.0000e-003	1.0000e-003		1.0000e-003	1.0000e-003	0.0000	2.2979	2.2979	1.8000e-004	0.0000	2.3024

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3.7 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5300e-003	1.2100e-003	0.0107	2.0000e-005	1.7500e-003	2.0000e-005	1.7600e-003	4.6000e-004	2.0000e-005	4.8000e-004	0.0000	1.7477	1.7477	1.0000e-004	0.0000	1.7501
Total	1.5300e-003	1.2100e-003	0.0107	2.0000e-005	1.7500e-003	2.0000e-005	1.7600e-003	4.6000e-004	2.0000e-005	4.8000e-004	0.0000	1.7477	1.7477	1.0000e-004	0.0000	1.7501

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5800e-003	0.0139	0.0190	6.0000e-005	3.2400e-003	8.0000e-005	3.3100e-003	8.7000e-004	7.0000e-005	9.4000e-004	0.0000	5.5433	5.5433	3.6000e-004	0.0000	5.5523
Unmitigated	1.5800e-003	0.0139	0.0190	6.0000e-005	3.2400e-003	8.0000e-005	3.3100e-003	8.7000e-004	7.0000e-005	9.4000e-004	0.0000	5.5433	5.5433	3.6000e-004	0.0000	5.5523

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Heavy Industry	2.25	2.25	2.25	8,693	8,693
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	2.25	2.25	2.25	8,693	8,693

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
General Heavy Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Heavy Industry	0.480138	0.040615	0.180049	0.120387	0.037372	0.006792	0.008746	0.115531	0.001256	0.001655	0.005192	0.001016	0.001248
Other Non-Asphalt Surfaces	0.480138	0.040615	0.180049	0.120387	0.037372	0.006792	0.008746	0.115531	0.001256	0.001655	0.005192	0.001016	0.001248
Other Asphalt Surfaces	0.480138	0.040615	0.180049	0.120387	0.037372	0.006792	0.008746	0.115531	0.001256	0.001655	0.005192	0.001016	0.001248

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4.9137	4.9137	9.0000e-005	2.0000e-005	4.9211
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4.9137	4.9137	9.0000e-005	2.0000e-005	4.9211
NaturalGas Mitigated	3.0000e-005	2.6000e-004	2.2000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2826	0.2826	1.0000e-005	1.0000e-005	0.2842
NaturalGas Unmitigated	3.0000e-005	2.6000e-004	2.2000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2826	0.2826	1.0000e-005	1.0000e-005	0.2842

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Heavy Industry	5295	3.0000e-005	2.6000e-004	2.2000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2826	0.2826	1.0000e-005	1.0000e-005	0.2842
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		3.0000e-005	2.6000e-004	2.2000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2826	0.2826	1.0000e-005	1.0000e-005	0.2842

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Heavy Industry	5295	3.0000e-005	2.6000e-004	2.2000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2826	0.2826	1.0000e-005	1.0000e-005	0.2842
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		3.0000e-005	2.6000e-004	2.2000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2826	0.2826	1.0000e-005	1.0000e-005	0.2842

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Heavy Industry	6540	4.9137	9.0000e-005	2.0000e-005	4.9211
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		4.9137	9.0000e-005	2.0000e-005	4.9211

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Heavy Industry	6540	4.9137	9.0000e-005	2.0000e-005	4.9211
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		4.9137	9.0000e-005	2.0000e-005	4.9211

6.0 Area Detail

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6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0264	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.1000e-004
Unmitigated	0.0264	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.1000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	8.3300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0181					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.1000e-004
Total	0.0265	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.1000e-004

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	8.3300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0181					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.1000e-004
Total	0.0265	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.1000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.5202	0.0113	2.7000e-004	1.8845
Unmitigated	1.5202	0.0113	2.7000e-004	1.8845

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Heavy Industry	0.346875 / 0	1.5202	0.0113	2.7000e-004	1.8845
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		1.5202	0.0113	2.7000e-004	1.8845

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Heavy Industry	0.346875 / 0	1.5202	0.0113	2.7000e-004	1.8845
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		1.5202	0.0113	2.7000e-004	1.8845

8.0 Waste Detail

8.1 Mitigation Measures Waste

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.3776	0.0223	0.0000	0.9354
Unmitigated	0.3776	0.0223	0.0000	0.9354

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	1.86	0.3776	0.0223	0.0000	0.9354
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.3776	0.0223	0.0000	0.9354

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	1.86	0.3776	0.0223	0.0000	0.9354
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.3776	0.0223	0.0000	0.9354

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
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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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Lake Shastina CSD Wastewater Improvement Project - Siskiyou County, Annual

11.0 Vegetation
