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Appendix 4.1F
Construction Air Quality Analysis

Appendix 4.1F
Construction Emissions

4.1F-1 Construction Emissions

The emissions were calculation for the construction phase (14-month period) of the new equipment of the proposed project, and the results of this analysis are discussed below.

4.1F-1.1 Construction Activities

The primary emission sources during construction will include exhaust from heavy construction equipment and vehicles.

Combustion emissions during construction will result from the following:

- Exhaust from the diesel construction equipment used for trenching, and construction of onsite structures;
- Exhaust from water trucks used to control construction dust emissions;
- Exhaust from portable welding machines;
- Exhaust from pickup trucks and diesel trucks used to transport workers and materials around the construction site;
- Exhaust from diesel trucks used to deliver concrete, fuel, and construction supplies to the construction site including the heavy hauling of major components using trucks; and
- Exhaust from vehicles used by workers to commute to the construction site.

Fugitive dust emissions from the construction will result from the following:

- Dust entrained during onsite travel on paved and unpaved surfaces; and
- Wind erosion of areas disturbed during construction activities.

4.1F-1.2 Emissions Calculations

To determine the potential worst-case daily construction impacts, exhaust and dust emission rates have been evaluated for each source of emissions. Maximum short-term impacts are calculated based on the equipment mix expected during Month 9 of the construction schedule.[1] Annual emissions are based on the average equipment mix during the peak 12-month period out of the overall 14-month construction period. The detailed construction emissions calculations are shown in the tables attached to this analysis (all tables are located at the end of the document). As discussed in the modeling protocol submitted to the CEC (see Appendix 4.1D), the CalEEMod model was used to calculate construction emissions for the proposed project. The following section provides additional details regarding the assumptions used in calculating construction emissions using the CalEEMod model.

Windblown Dust. Emissions of windblown dust are not included in CalEEMod, so those emissions were calculated manually. The disturbed area for these calculations was determined by dividing the total active construction area (0.7 acres) by the months of

[1] See calculations in Section 4.1F-4.

construction. A PM_{10} emission factor of 0.011 ton/acre-month was used to estimate these emissions.[2]

Construction Access. The primary construction access off of Mt. Vernon Avenue is paved. In addition, the construction worker parking and laydown areas are also paved. Therefore, the onsite worker travel, delivery and haul truck travel were assumed to occur on paved surfaces.

Onsite Travel during Construction. For delivery and haul vehicles, the onsite travel distance was taken as the distance from the plant entrance to the construction area. For worker vehicles, the onsite travel distance was taken as the distance from the plant entrance to the parking area. Worker travel distance was doubled to account for round-trip travel.

A manual calculation was performed to calculate the onsite paved surface vehicle travel emissions (combustion and paved fugitive dust emissions). This was done by first calculating the ratio of the onsite paved surface vehicle trip distances (a round-trip distance on paved surface of approximately 0.22 miles was used for workers, a one-way distance of 0.22 and 0.25 miles on paved surface was used to estimate the onsite paved fugitive dust emissions for delivery and haul trucks) vs. the CalEEMod model offsite vehicle trip distances by vehicle type (offsite round-trip distances were approximately 80 miles for workers, 40 miles (one-way) for delivery trucks and 32 miles (one-way) for haul trucks). The offsite paved surface travel emissions per vehicle type (which includes a fugitive dust component) calculated by the CalEEMod model were multiplied by these ratios to calculate onsite vehicle combustion and paved surface travel emissions.

Paved Surface Travel Emissions Calculation Assumptions. The CalEEMod model default silt content and silt loading values were used for the unpaved/paved surface travel emission calculations. As described in the CalEEMod model user guide (see Section 4.4.3), EPA AP-42 methods are used to calculate fugitive dust emissions for paved and unpaved road travel. The CalEEMod model defaults for silt content/silt loading are based on statewide averages; these values are as follows: silt content = 8.5% and silt loading of 0.1 g/m^2.

Fugitive Dust Control Efficiency. The following fugitive dust control efficiencies were used as part of the CalEEMod model runs performed for construction activities. Mitigation measures used to minimize fugitive dust are discussed further below.

- As a CalEEMod model input, the onsite vehicle speed limit was set to 15 miles per hour. As described in Appendix A of the CalEEMod model user guide,[3] the resulting onsite unpaved road travel PM_{10} emission control efficiency associated with this speed limit is based on mitigation measures described by SCAQMD. The SCAQMD lists an unpaved road travel PM_{10} emission control efficiency of 57% for this mitigation measure.[4]

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[2] Source: Table ES-2, "Improvement of Specific Emission Factors (BACM Project No. 1), Final Report," prepared for South Coast AQMD by Midwest Research Institute, March 1996.

[3] Section 11.1, CalEEMod User Guide, Appendix A, CalEEMod User Guide and all the related documents are available at: http://www.caleemod.com

[4] SCAQMD Mitigation Measures and Control Efficiencies, Fugitive Dust, Table XI-A http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mitigation-measures-and-control-efficiencies/fugitive-dust

- For water application in active construction areas (watered at least 3 times a day), the PM_{10} emission control efficiency is 61% in the CalEEMod model for construction activities (e.g. grading, material handling, etc.).
- Paved roads within the construction site will be cleaned at least once per day on days when construction activities occur. The onsite paved road travel PM_{10} emission control efficiency was set to 9% as a CalEEMod model input based on control levels described by the SCAQMD.[5]

Exhaust Emission Source Assumptions. The number, type, and engine rating of the equipment used in the construction impact analysis were based on equipment loadings provided by the owner's engineer.

The CalEEMod model default engine load factors were used for the construction emission calculations (a function of the type of construction equipment in question). Due to the large number of different type/size equipment (which impacts the availability of Tier 4 engines), it was assumed that EPA Tier 4i engines would be used for the larger equipment (engines greater than 75 hp) and EPA Tier 4 engines would be used for smaller equipment (engines equal to or smaller than75 hp).

4.1F-2 Available Mitigation Measures

Listed below are typical mitigation measures being proposed to control exhaust emissions from the diesel heavy equipment and potential emissions of fugitive dust during construction activities.

- Unpaved surface travel and disturbed areas in the project construction site will be watered as frequently as necessary to prevent fugitive dust plumes. The frequency of watering can be reduced or eliminated during periods of precipitation.
- The vehicle speed limit will be 15 miles per hour within the construction site.
- The construction site entrances shall be posted with visible speed limit signs.
- Construction equipment vehicle tires will be inspected and washed as necessary to be cleaned free of dirt prior to entering paved roadways.
- Gravel ramps of at least 20 feet in length will be provided at the tire washing/cleaning station.
- Unpaved exits from the construction site will be graveled or treated to prevent track-out to public roadways.
- Construction vehicles will enter the construction site through the treated entrance roadways, unless an alternative route has been submitted to and approved by the Compliance Project Manager.
- Construction areas adjacent to any paved roadway will be provided with sandbags or other measures as specified in the Storm Water Pollution Prevention Plan (SWPPP) to prevent run-off to roadways.

[5] SCAQMD Mitigation Measures and Control Efficiencies, Fugitive Dust, Table XI-C http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mitigation-measures-and-control-efficiencies/fugitive-dust

- Paved roads within the construction site will be cleaned at least once per day (or less during periods of precipitation) on days when construction activity occurs to prevent the accumulation of dirt and debris.
- At least the first 500 feet of any public roadway exiting from the construction site shall be cleaned at least once daily when dirt or runoff from the construction site is visible on public roadways.
- Soil storage piles and disturbed areas that remain inactive for longer than 10 days will be covered or treated with appropriate dust suppressant compounds.
- Vehicles used to transport solid bulk material on public roadways and having the potential to cause visible emissions will be provided with a cover, or the materials will be sufficiently wetted and loaded onto the trucks in a manner to provide at least one foot of freeboard.
- Wind erosion control techniques (such as windbreaks, water, chemical dust suppressants, and/or vegetation) will be used on all construction areas that may be disturbed. Any windbreaks installed to comply with this condition shall remain in place until the soil is stabilized or permanently covered with vegetation.

An on-site Air Quality Construction Mitigation Manager will be responsible for directing and documenting compliance with construction related mitigation conditions.

4.1F-2.1 Estimates of Emissions with Mitigation Measures: Onsite Construction

Tables 4.1F-1 and 4.1F-2 show the estimated maximum daily and annual heavy equipment exhaust and fugitive dust emissions with the assumptions described above and the recommended mitigation measures for onsite construction activities. Detailed emission calculations are included in Section 4.1F-4.

4.1F-3 Air Quality Impact Analysis

A dispersion modeling analysis was conducted based on the construction emissions discussed above using the approach discussed in the modeling protocol submitted to the SCAQMD and CEC (see Appendix 4.1D).

As shown on Table 4.1F-3, the modeling analysis shows that the PRP construction phase impacts will not interfere with the attainment or maintenance of the applicable air quality standards or cause additional violations of any standards, with the exception of PM_{10}/$PM_{2.5}$ for which the state standards are already exceeded (the project area is also classified as a nonattainment area for the federal $PM_{2.5}$ standards). The maximum 24-hr and annual impacts shown on Table 4.1F-3 are below the 24-hour and annual average federal significant impact levels (SILs) of 5 µg/m^3 and 1 µg/m^3, respectively. In addition, maximum 24-hr and annual $PM_{2.5}$ impacts shown on Table 4.1F-3 are below the 24-hour and annual average federal SILs of 1.2 µg/m^3 and 0.9 µg/m^3, respectively. The primary purpose of federal SILs is to identify a level of ambient impact that is sufficiently low relative to an ambient air quality standard such that the impact can be considered de minimis. Hence, EPA considers a source whose individual impact falls below a SIL to have a de minimis impact on air quality concentrations that already exist. If a project's

impacts are below a federal SIL, these impacts are not considered to cause or contribute to a violation of an ambient air quality standard and/or increment.[6]

Consequently, since the PRP construction $PM_{10}/PM_{2.5}$ impacts are below federal SILs, the Applicant does not believe the impacts will cause or contribute to a violation of the 24-hr or annual $PM_{10}/PM_{2.5}$ ambient air quality standards.[7] As such the $PM_{10}/PM_{2.5}$ impacts for project construction will be less than significant.

A screening health risk assessment (HRA) of construction impacts was performed in accordance with OEHHA guidance, which requires adjusting the 30-year lifetime dosage to an exposure period equal to that of the construction period. The screening HRA for construction impacts was prepared using the latest version of CARB's Hotspots Analysis and Reporting Program, Version 2 (HARP2) model (ARB, 2015), the ARB May 2015 health database (OEHHA/ARB, 2015), and the OEHHA Hot Spots Program Guidance Manual (OEHHA, 2015). The USEPA-recommended air dispersion model, AERMOD, was used along with 5 years (2008–2012) of representative meteorological data as described in Section 4.1.5.1. The HARP2 modeling was performed using the option where the ambient impact modeling was performed with the AERMOD model outside of the ADMRT program. The post file outputs of AERMOD were used as inputs in the risk calculation portion of the ADMRT program. The results of this analysis show a maximum off-property worker cancer risk of approximately 0.5 in one million (located on the project property line). The 1 in a million cancer risk calculated based on residential exposure does not extend beyond the nearby surrounding warehouse/industrial area (areas with no residential receptors), thus the maximum cancer risk at possible residential receptors is less than 1 in a million. These impact are below the CEC significance threshold of 10 in one million. The construction criteria pollutant and HRA modeling files are included in a DVD submitted to the SCAQMD and CEC as part of the SPPE process for this project.

4.1F-4 Detailed Construction Emissions Calculations

Tables 4.1F-4 through 4.1F-13 provide detailed construction emission calculations.

[6] 75 FR 64891: "Accordingly, a source that demonstrates that the projected ambient impact of its proposed emissions increase does not exceed the SIL for that pollutant at a location where a NAAQS or increment violation occurs is not considered to cause or contribute to that violation."

[7] In January 2013, EPA sought, and the U.S. Court of Appeals for the District of Columbia Circuit granted, remand and vacatur of these SILs as they apply for purposes of avoiding a cumulative impacts analysis under federal PSD requirements (40 CFR § 51.166(k)(2) and § 52.21(k)(2)). However, EPA has retained these SILs for purposes of demonstrating whether a source locating in an attainment/unclassifiable area will be deemed to cause or contribute to a violation in a downwind nonattainment area. See Sierra Club v. EPA, No. 10-1413 (D.C. Cir. 2013), slip op. 9. Accordingly, application of these SILs for purposes of satisfying the SCAQMD's requirement to assure that a new or modified facility does not interfere with the attainment or maintenance of an ambient air quality standard (SCAQMD Rule 1303) is appropriate.

TABLE 4.1F-1

Maximum Daily Emissions During Construction, Pounds per Day

	NOx	CO	VOC	SOx	PM_{10}	$PM_{2.5}$
Onsite						
Construction Equipment and Onsite Vehicle	23.30	44.01	1.21	0.08	0.18	0.18
Fugitive Dust (Construction Equipment and Onsite Vehicle)					0.03	0.01
Fugitive Dust (Wind Erosion)					0.04	0.02
Offsite						
Worker Travel	3.67	41.02	1.30	0.11	0.07	0.07
Delivery Trucks Travel	7.04	4.29	0.44	0.02	0.13	0.12
Haul Trucks Travel	9.88	6.54	0.59	0.03	0.15	0.14
Fugitive Dust (Worker, Delivery and Haul Trucks)[a]					9.27	2.49
Total Emissions (Onsite and Offsite)	43.89	95.86	3.54	0.24	9.86	3.01

[a] Offsite paved emissions.

TABLE 4.1F-2

Peak Annual Emissions During Construction, Tons per Year

	NOx	CO	VOC	SOx	PM_{10}	$PM_{2.5}$
Onsite						
Construction Equipment and Onsite Vehicle	2.62	4.90	0.13	0.01	0.02	0.02
Fugitive Dust (Construction Equipment and Onsite Vehicle)					0.002	0.001
Fugitive Dust (Wind Erosion)					0.007	0.003
Offsite						
Worker Travel	0.32	3.19	0.11	0.009	0.006	0.005
Delivery Trucks Travel	0.53	0.31	0.03	0.002	0.009	0.009
Haul Trucks Travel	0.83	0.53	0.05	0.002	0.012	0.011
Fugitive Dust (Worker, Delivery and Haul Trucks)[a]					0.74	0.20
Total Emissions (Onsite and Offsite)	4.29	8.94	0.32	0.02	0.79	0.24

[a] Offsite paved emissions.

Table 4.1F-3

Modeled Maximum Impacts During the Construction Period

Pollutant	Averaging Time	Maximum Project Impact (µg/m³)	Background (µg/m³)	Total Impact (µg/m³)	State Standard (µg/m³)	Federal Standard (µg/m³)
NO_2	1-hour	133.5	167.5	301.0	339	--
	98th percentile	n/a[a]	n/a[a]	n/a[a]	--	188
	Annual	13.6[d]	42.7	56.3	57	100
SO_2	1-hour	1.4	11.3	12.7	655	--
	99th percentile	n/a[b]	n/a[b]	n/a[b]	--	196
	24-hour	0.3	8.4	8.7	105	--
CO	1-hour	765.2	2863.8	3,629	23,000	40,000
	8-hour	367.0	1832.8	2,200	10,000	10,000
PM_{10}	24-hour	1.3	100	101	50	150
	Annual	0.5	33.6	34	20	--
$PM_{2.5}$	24-hour	0.9	32[c]	33	--	35
	Annual	0.3	13	13	12	12

[a] Due to the short-term nature of construction activities (only 14-months), it is not necessary to model the impacts for this multi-year based ambient air quality standard.

[b] Due to the short-term nature of construction activities (only 14-months), it is not necessary to model the impacts for this multi-year based ambient air quality standard.

[c] 24-hour $PM_{2.5}$ background concentration reflects 3-year average of the 98th percentile values based on form of standard.

[d] The third highest modeled impact is shown because the first and second highest modeled impacts occur at the corner of the plant boundary which is within the existing fenceline surrounding the project site (in an area that can't be accessed by the public).

TABLE 4.1F-4
Construction of the PRP – Daily and Annual Construction Emissions

Maximum Daily Emissions (lbs/day)						
	NOx	**CO**	**VOC**	**SOx**	**PM_{10}**	**$PM_{2.5}$**
Onsite						
Off-Road Equipment and Onsite Vehicle (combustion)	23.30	44.01	1.21	0.08	0.18	0.18
Construction and Onsite Vehicle - Fugitive Dust					0.03	0.01
Wind Erosion - Fugitive Dust					0.04	0.02
Subtotal (Onsite)	23.30	44.01	1.21	0.08	0.24	0.20
Offsite						
Worker Travel (combustion)	3.67	41.02	1.30	0.11	0.07	0.07
Delivery Truck (combustion)	7.04	4.29	0.44	0.02	0.13	0.12
Haul Truck (combustion)	9.88	6.54	0.59	0.03	0.15	0.14
Worker Travel - Fugitive Dust					7.96	2.12
Delivery Truck - Fugitive Dust					0.67	0.19
Haul Truck - Fugitive Dust					0.64	0.18
Subtotal (Offsite)	20.59	51.84	2.33	0.16	9.61	2.81
Total	43.89	95.86	3.54	0.24	9.86	3.01
Peak Annual Emissions (tons/yr, rolling 12-month maximum)						
	NOx	**CO**	**VOC**	**SOx**	**PM_{10}**	**$PM_{2.5}$**
Onsite						
Off-Road Equipment and Onsite Vehicle (combustion)	2.62	4.90	0.13	0.01	0.02	0.02
Construction and Onsite Vehicle - Fugitive Dust					0.002	0.001
Wind Erosion - Fugitive Dust					0.007	0.003
Subtotal (Onsite)	2.62	4.90	0.13	0.01	0.02	0.02
Offsite						
Worker Travel (combustion)	0.32	3.19	0.11	0.009	0.006	0.005
Delivery Truck (combustion)	0.53	0.31	0.03	0.002	0.009	0.009
Delivery Truck (combustion)	0.83	0.53	0.05	0.002	0.012	0.011
Worker Travel - Fugitive Dust					0.64	0.17
Delivery Truck - Fugitive Dust					0.05	0.01
Haul Truck – Fugitive Dust					0.05	0.01
Subtotal (Offsite)	1.67	4.03	0.19	0.01	0.77	0.22
Total	4.29	8.94	0.32	0.02	0.79	0.24

TABLE 4.1F-5
Construction of the Proposed PRP – Modeled Emissions, Short-Term Impacts

Short-Term Impacts (24 hours and less) **Daily working hours (hr/day)**	**10**				
	NOx	**CO**	**SOx**	**PM_{10}**	**$PM_{2.5}$**
TOTAL					
Off Road Equipment and Onsite Vehicle (Combustion) (lbs/day)	23.30	44.01	0.08	0.18	0.18
Off Road Equipment and Onsite Vehicle (Combustion) (lbs/hr)	2.33	4.40	0.01	0.02	0.02
Off Road Equipment and Onsite Vehicle (Combustion) (g/sec)	0.29	0.55	0.001	0.002	0.002
Construction and Onsite Vehicle (Fugitive Dust) (lbs/day)				2.80E-02	7.57E-03
Construction and Onsite Vehicle (Fugitive Dust) (lbs/hr)				2.80E-03	7.57E-04
Construction and Onsite Vehicle (Fugitive Dust) (g/sec)				3.53E-04	9.53E-05
Wind Erosion (Fugitive Dust) (lbs/day)				3.90E-02	1.56E-02
Wind Erosion (Fugitive Dust) (lbs/hr)[a]				1.62E-03	6.49E-04
Wind Erosion (Fugitive Dust) (g/sec)				2.05E-04	8.18E-05

[a] Wind Erosion fugitive dust emissions are assumed to occur 24 hrs/day.

TABLE 4.1F-6
Construction of the PRP – Modeled Emissions, Long-Term Impacts

Long-Term Impacts (Annual)					
Annual Number of Work Days, Rolling 12-month period (days/yr)	**261**				
Daily working hours (hr/day)	**10**				
	NOx	**CO**	**SOx**	**PM_{10}**	**$PM_{2.5}$**
TOTAL					
Off Road Equipment and Onsite Vehicle (Combustion) (tons/yr)	2.62	4.90	0.01	0.02	0.02
Off Road Equipment and Onsite Vehicle (Combustion) (lbs/hr)	2.01	3.76	0.01	0.01	0.01
Off Road Equipment and Onsite Vehicle (Combustion) (g/sec)	0.25	0.47	0.00	0.00	0.00
Construction and Onsite Vehicle (Fugitive Dust) (tons/yr)				2.42E-03	6.57E-04
Construction and Onsite Vehicle (Fugitive Dust) (lbs/hr)				1.86E-03	5.03E-04
Construction and Onsite Vehicle (Fugitive Dust) (g/sec)				2.34E-04	6.34E-05
Wind Erosion (Fugitive Dust) (tons/yr)				6.55E-03	2.62E-03
Wind Erosion (Fugitive Dust) (lbs/hr)[a]				1.49E-03	5.98E-04
Wind Erosion (Fugitive Dust) (g/sec)				1.88E-04	7.53E-05

[a] Wind Erosion fugitive dust emissions are assumed to occur 24 hrs/day.

TABLE 4.1F-7
Construction of the PRP – Greenhouse Gas Emission Calculations

	GHG Emissions (MT, Total for 14-month Period)			
	CO_2	**CH_4**	**N_2O**	**CO_2e**
Onsite Off-Road Equipment and Onsite Vehicle	839	0.20	0	844
Offsite Worker Travel	641	3.32E-02	0	642
Offsite Delivery Truck	156	0.00	0	157
Offsite Haul Truck	223	1.65E-03	0	223
Total	1,860	0.23	0	1,866

TABLE 4.1F-8

Construction of the PRP – Monthly and Annual Emission Calculations

Project Month		1	2	3	4	5	6	7	8	9	10	11	12	13	14
		ROG													
Onsite Off-Road Equipment	(tons/month)	0.0061	0.0112	0.0123	0.0122	0.0122	0.0118	0.0139	0.0121	0.0133	0.0082	0.0080	0.0080	0.0084	0.0021
Onsite Vehicle	(tons/month)	2.08E-05	1.85E-05	3.95E-05	4.49E-05	7.64E-05	8.28E-05	1.08E-04	9.64E-05	1.09E-04	8.45E-05	7.63E-05	6.31E-05	4.74E-05	8.33E-06
Onsite Off-Road + Onsite Vehicle	(tons/month)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Offsite Haul Truck	(tons/month)	1.80E-03	1.30E-03	3.00E-03	3.00E-03	5.52E-03	6.00E-03	5.92E-03	5.45E-03	6.40E-03	2.96E-03	3.08E-03	3.08E-03	2.96E-03	0.00E+00
Offsite Delivery Truck	(tons/month)	4.70E-04	5.20E-04	1.19E-03	1.24E-03	2.49E-03	2.37E-03	4.99E-03	4.34E-03	4.77E-03	4.55E-03	2.49E-03	2.28E-03	4.80E-04	5.00E-04
Offsite Worker Travel	(tons/month)	1.51E-03	2.01E-03	3.45E-03	5.31E-03	7.12E-03	8.31E-03	1.23E-02	1.09E-02	1.20E-02	1.32E-02	1.40E-02	9.63E-03	7.86E-03	2.03E-03
Onsite Off-Road Equipment	12-month rolling total (tons/year)												1.29E-01	1.32E-01	1.23E-01
Onsite Off-Road + Onsite Vehicle	12-month rolling total (tons/year)												1.30E-01	1.32E-01	1.23E-01
Offsite Haul Truck	12-month rolling total (tons/year)												4.75E-02	4.87E-02	4.74E-02
Offsite Delivery Truck	12-month rolling total (tons/year)												3.17E-02	3.17E-02	3.17E-02
Offsite Worker Travel	12-month rolling total (tons/year)												9.97E-02	1.06E-01	1.06E-01
		NOx													
Onsite Off-Road Equipment	(tons/month)	0.1312	0.2011	0.2435	0.2376	0.2376	0.2295	0.2680	0.2330	0.2563	0.1682	0.1676	0.1781	0.1866	0.0731
Onsite Vehicle	(tons/month)	3.05E-04	2.44E-04	5.53E-04	5.73E-04	1.05E-03	1.12E-03	1.32E-03	1.19E-03	1.36E-03	9.06E-04	7.41E-04	6.85E-04	4.91E-04	6.22E-05
Onsite Off-Road + Onsite Vehicle	(tons/month)	0.13	0.20	0.24	0.24	0.24	0.23	0.27	0.23	0.26	0.17	0.17	0.18	0.19	0.07
Offsite Haul Truck	(tons/month)	3.17E-02	2.28E-02	5.28E-02	5.28E-02	9.71E-02	1.06E-01	9.80E-02	9.02E-02	1.06E-01	4.90E-02	5.10E-02	5.10E-02	4.90E-02	0.00E+00
Offsite Delivery Truck	(tons/month)	8.26E-03	9.04E-03	2.06E-02	2.16E-02	4.33E-02	4.13E-02	8.24E-02	7.17E-02	7.88E-02	7.53E-02	4.12E-02	3.76E-02	7.88E-03	8.24E-03
Offsite Worker Travel	(tons/month)	4.31E-03	5.73E-03	9.85E-03	1.52E-02	2.03E-02	2.37E-02	3.71E-02	3.28E-02	3.63E-02	3.97E-02	4.23E-02	2.91E-02	2.37E-02	6.13E-03
Onsite Off-Road Equipment	12-month rolling total (tons/year)												2.55E+00	2.61E+00	2.48E+00
Onsite Off-Road + Onsite Vehicle	12-month rolling total (tons/year)												2.56E+00	2.62E+00	2.49E+00
Offsite Haul Truck	12-month rolling total (tons/year)												8.08E-01	8.25E-01	8.02E-01
Offsite Delivery Truck	12-month rolling total (tons/year)												5.31E-01	5.31E-01	5.30E-01
Offsite Worker Travel	12-month rolling total (tons/year)												2.96E-01	3.16E-01	3.16E-01
		CO													
Onsite Off-Road Equipment	(tons/month)	0.2223	0.3731	0.4486	0.4464	0.4464	0.4316	0.5062	0.4402	0.4842	0.3181	0.3149	0.3307	0.3465	0.1244
Onsite Vehicle	(tons/month)	3.00E-04	2.99E-04	5.96E-04	7.46E-04	1.17E-03	1.30E-03	1.80E-03	1.61E-03	1.81E-03	1.60E-03	1.57E-03	1.19E-03	9.38E-04	1.96E-04
Onsite Off-Road + Onsite Vehicle	(tons/month)	0.22	0.37	0.45	0.45	0.45	0.43	0.51	0.44	0.49	0.32	0.32	0.33	0.35	0.12
Offsite Haul Truck	(tons/month)	0.0198	0.0143	0.0330	0.0330	0.0607	0.0660	0.0649	0.0597	0.0701	0.0325	0.0338	0.0338	0.0325	0.0000
Offsite Delivery Truck	(tons/month)	0.0046	0.0051	0.0115	0.0121	0.0242	0.0231	0.0482	0.0419	0.0461	0.0440	0.0241	0.0220	0.0046	0.0048
Offsite Worker Travel	(tons/month)	0.0437	0.0581	0.0998	0.1535	0.2058	0.2401	0.3741	0.3307	0.3667	0.4008	0.4267	0.2936	0.2395	0.0618
Onsite Off-Road Equipment	12-month rolling total (tons/year)												4.76E+00	4.89E+00	4.64E+00
Onsite Off-Road + Onsite Vehicle	12-month rolling total (tons/year)												4.78E+00	4.90E+00	4.65E+00
Offsite Haul Truck	12-month rolling total (tons/year)												5.22E-01	5.34E-01	5.20E-01
Offsite Delivery Truck	12-month rolling total (tons/year)												3.07E-01	3.07E-01	3.07E-01
Offsite Worker Travel	12-month rolling total (tons/year)												2.99E+00	3.19E+00	3.19E+00
		SO2													
Onsite Off-Road Equipment	(tons/month)	3.90E-04	6.90E-04	8.20E-04	8.30E-04	8.30E-04	7.70E-04	9.10E-04	7.90E-04	8.70E-04	5.60E-04	5.50E-04	5.60E-04	5.80E-04	1.90E-04
Onsite Vehicle	(tons/month)	1.12E-06	1.05E-06	2.19E-06	2.57E-06	4.25E-06	4.65E-06	6.69E-06	5.96E-06	6.74E-06	5.60E-06	5.19E-06	4.06E-06	3.15E-06	6.33E-07
Onsite Off-Road + Onsite Vehicle	(tons/month)	3.91E-04	6.91E-04	8.22E-04	8.33E-04	8.34E-04	7.75E-04	9.17E-04	7.96E-04	8.77E-04	5.66E-04	5.55E-04	5.64E-04	5.83E-04	1.91E-04
Offsite Haul Truck	(tons/month)	9.00E-05	6.00E-05	1.50E-04	1.50E-04	2.70E-04	3.00E-04	3.00E-04	2.70E-04	3.20E-04	1.50E-04	1.50E-04	1.50E-04	1.50E-04	0.00E+00
Offsite Delivery Truck	(tons/month)	2.00E-05	3.00E-05	6.00E-05	6.00E-05	1.30E-04	1.20E-04	2.70E-04	2.40E-04	2.60E-04	2.50E-04	1.40E-04	1.20E-04	3.00E-05	3.00E-05
Offsite Worker Travel	(tons/month)	1.10E-04	1.50E-04	2.50E-04	3.90E-04	5.20E-04	6.00E-04	1.04E-03	9.20E-04	1.02E-03	1.11E-03	1.18E-03	8.10E-04	6.60E-04	1.70E-04
Onsite Off-Road Equipment	12-month rolling total (tons/year)												8.57E-03	8.76E-03	8.26E-03
Onsite Off-Road + Onsite Vehicle	12-month rolling total (tons/year)												8.62E-03	8.81E-03	8.31E-03
Offsite Haul Truck	12-month rolling total (tons/year)												2.36E-03	2.42E-03	2.36E-03
Offsite Delivery Truck	12-month rolling total (tons/year)												1.70E-03	1.71E-03	1.71E-03
Offsite Worker Travel	12-month rolling total (tons/year)												8.10E-03	8.65E-03	8.67E-03

TABLE 4.1F-8 (CONT.)

Construction of the PRP – Monthly and Annual Emission Calculations

Project Month		1	2	3	4	5	6	7	8	9	10	11	12	13	14
		PM10													
Onsite Off-Road Equipment	(tons/month)	1.18E-03	1.75E-03	1.87E-03	1.24E-03	1.24E-03	1.20E-03	1.42E-03	1.24E-03	1.36E-03	8.70E-04	8.50E-04	8.70E-04	9.10E-04	2.70E-04
Onsite Vehicle	(tons/month)	4.51E-06	3.73E-06	8.39E-06	8.77E-06	1.60E-05	1.69E-05	2.18E-05	1.96E-05	2.24E-05	1.54E-05	1.24E-05	1.14E-05	7.92E-06	1.13E-06
Onsite Off-Road + Onsite Vehicle	(tons/month)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite Haul Truck	(tons/month)	4.50E-04	3.30E-04	7.60E-04	7.60E-04	1.39E-03	1.51E-03	1.51E-03	1.39E-03	1.63E-03	7.60E-04	7.90E-04	7.90E-04	7.60E-04	0.00E+00
Offsite Delivery Truck	(tons/month)	1.40E-04	1.60E-04	3.60E-04	3.80E-04	7.50E-04	7.20E-04	1.48E-03	1.29E-03	1.42E-03	1.35E-03	7.40E-04	6.80E-04	1.40E-04	1.50E-04
Offsite Worker Travel	(tons/month)	8.00E-05	1.00E-04	1.70E-04	2.70E-04	3.60E-04	4.20E-04	6.90E-04	6.10E-04	6.80E-04	7.40E-04	7.90E-04	5.40E-04	4.40E-04	1.10E-04
Onsite Off-Road Equipment	12-month rolling total (tons/year)												1.51E-02	1.48E-02	1.33E-02
Onsite Off-Road + Onsite Vehicle	12-month rolling total (tons/year)												1.53E-02	1.50E-02	1.35E-02
Offsite Haul Truck	12-month rolling total (tons/year)												1.21E-02	1.24E-02	1.21E-02
Offsite Delivery Truck	12-month rolling total (tons/year)												9.47E-03	9.47E-03	9.46E-03
Offsite Worker Travel	12-month rolling total (tons/year)												5.45E-03	5.81E-03	5.82E-03
Onsite Fugitive (Off-Road)	(tons/month)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Fugitive (Onsite Vehicle)	(tons/month)	4.10E-05	4.44E-05	8.54E-05	1.13E-04	1.71E-04	1.91E-04	3.02E-04	2.68E-04	3.00E-04	2.88E-04	2.87E-04	2.10E-04	1.64E-04	3.88E-05
Onsite Off-Road + Onsite Vehicle	(tons/month)	4.10E-05	4.44E-05	8.54E-05	1.13E-04	1.71E-04	1.91E-04	3.02E-04	2.68E-04	3.00E-04	2.88E-04	2.87E-04	2.10E-04	1.64E-04	3.88E-05
Offsite Fugitive - Haul Truck	(tons/month)	1.91E-03	1.38E-03	3.19E-03	3.19E-03	5.87E-03	6.38E-03	6.38E-03	5.87E-03	6.89E-03	3.19E-03	3.32E-03	3.32E-03	3.19E-03	0.00E+00
Offsite Fugitive - Delivery Truck	(tons/month)	7.00E-04	7.60E-04	1.74E-03	1.82E-03	3.64E-03	3.48E-03	7.62E-03	6.63E-03	7.29E-03	6.96E-03	3.81E-03	3.48E-03	7.30E-04	7.60E-04
Offsite Fugitive - Worker Travel	(tons/month)	8.08E-03	1.07E-02	1.85E-02	2.84E-02	3.81E-02	4.44E-02	7.65E-02	6.76E-02	7.49E-02	8.19E-02	8.72E-02	6.00E-02	4.90E-02	1.26E-02
Onsite Fugitive (Off-Road)	12-month rolling total (tons/year)												0.00E+00	0.00E+00	0.00E+00
Onsite Fugitive - Off-Road + Onsite Veh	12-month rolling total (tons/year)												2.30E-03	2.42E-03	2.42E-03
Offsite Fugitive - Haul Truck	12-month rolling total (tons/year)												5.09E-02	5.22E-02	5.08E-02
Offsite Fugitive - Delivery Truck	12-month rolling total (tons/year)												4.79E-02	4.80E-02	4.80E-02
Offsite Fugitive - Worker Travel	12-month rolling total (tons/year)												5.96E-01	6.37E-01	6.39E-01
		PM2.5													
Onsite Off-Road Equipment	(tons/month)	1.18E-03	1.75E-03	1.87E-03	1.24E-03	1.24E-03	1.20E-03	1.42E-03	1.24E-03	1.36E-03	8.70E-04	8.50E-04	8.70E-04	9.10E-04	2.70E-04
Onsite Vehicle	(tons/month)	4.19E-06	3.36E-06	7.72E-06	8.08E-06	1.47E-05	1.55E-05	2.01E-05	1.81E-05	2.06E-05	1.41E-05	1.14E-05	1.04E-05	7.23E-06	1.07E-06
Onsite Off-Road + Onsite Vehicle	(tons/month)	1.18E-03	1.75E-03	1.88E-03	1.25E-03	1.25E-03	1.22E-03	1.44E-03	1.26E-03	1.38E-03	8.84E-04	8.61E-04	8.80E-04	9.17E-04	2.71E-04
Offsite Haul Truck	(tons/month)	4.20E-04	3.00E-04	7.00E-04	7.00E-04	1.28E-03	1.39E-03	1.39E-03	1.28E-03	1.50E-03	6.90E-04	7.20E-04	7.20E-04	6.90E-04	0.00E+00
Offsite Delivery Truck	(tons/month)	1.30E-04	1.40E-04	3.30E-04	3.50E-04	6.90E-04	6.60E-04	1.36E-03	1.19E-03	1.30E-03	1.24E-03	6.80E-04	6.20E-04	1.30E-04	1.40E-04
Offsite Worker Travel	(tons/month)	7.00E-05	9.00E-05	1.60E-04	2.50E-04	3.30E-04	3.80E-04	6.40E-04	5.60E-04	6.30E-04	6.80E-04	7.30E-04	5.00E-04	4.10E-04	1.10E-04
Onsite Off-Road Equipment	12-month rolling total (tons/year)												1.51E-02	1.48E-02	1.33E-02
Onsite Off-Road + Onsite Vehicle	12-month rolling total (tons/year)												1.52E-02	1.50E-02	1.35E-02
Offsite Haul Truck	12-month rolling total (tons/year)												1.11E-02	1.14E-02	1.11E-02
Offsite Delivery Truck	12-month rolling total (tons/year)												8.69E-03	8.69E-03	8.69E-03
Offsite Worker Travel	12-month rolling total (tons/year)												5.02E-03	5.36E-03	5.38E-03
Onsite Fugitive (Off-Road)	(tons/month)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Fugitive (Onsite Vehicle)	(tons/month)	1.12E-05	1.21E-05	2.32E-05	3.06E-05	4.65E-05	5.20E-05	8.19E-05	7.29E-05	8.14E-05	7.81E-05	7.73E-05	5.67E-05	4.41E-05	1.05E-05
Onsite Off-Road + Onsite Vehicle	(tons/month)	1.12E-05	1.21E-05	2.32E-05	3.06E-05	4.65E-05	5.20E-05	8.19E-05	7.29E-05	8.14E-05	7.81E-05	7.73E-05	5.67E-05	4.41E-05	1.05E-05
Offsite Fugitive - Haul Truck	(tons/month)	5.30E-04	3.80E-04	8.80E-04	8.80E-04	1.62E-03	1.76E-03	1.76E-03	1.62E-03	1.90E-03	8.80E-04	9.20E-04	9.20E-04	8.80E-04	0.00E+00
Offsite Fugitive - Delivery Truck	(tons/month)	2.00E-04	2.20E-04	5.00E-04	5.20E-04	1.05E-03	1.00E-03	2.19E-03	1.91E-03	2.10E-03	2.00E-03	1.10E-03	1.00E-03	2.10E-04	2.20E-04
Offsite Fugitive - Worker Travel	(tons/month)	2.16E-03	2.87E-03	4.93E-03	7.59E-03	1.02E-02	1.19E-02	2.04E-02	1.81E-02	2.00E-02	2.19E-02	2.33E-02	1.60E-02	1.31E-02	3.38E-03
Onsite Fugitive (Off-Road)	12-month rolling total (tons/year)												0.00E+00	0.00E+00	0.00E+00
Onsite Fugitive - Off-Road + Onsite Veh	12-month rolling total (tons/year)												6.24E-04	6.57E-04	6.55E-04
Offsite Fugitive - Haul Truck	12-month rolling total (tons/year)												1.41E-02	1.44E-02	1.40E-02
Offsite Fugitive - Delivery Truck	12-month rolling total (tons/year)												1.38E-02	1.38E-02	1.38E-02
Offsite Fugitive - Worker Travel	12-month rolling total (tons/year)												1.59E-01	1.70E-01	1.71E-01

TABLE 4.1F-8 (CONT.)

Construction of the PRP – Monthly and Annual Emission Calculations

Project Month		1	2	3	4	5	6	7	8	9	10	11	12	13	14
		CO2													
Onsite Off-Road Equipment	(MT/month)	33.38	61.81	73.40	74.05	74.05	69.84	81.32	70.71	77.79	50.20	49.22	50.11	52.49	16.73
Onsite Vehicle	(MT/month)	9.69E-02	8.80E-02	1.86E-01	2.14E-01	3.61E-01	3.92E-01	5.40E-01	4.83E-01	5.46E-01	4.41E-01	4.04E-01	3.26E-01	2.45E-01	4.68E-02
Onsite Off-Road + Onsite Vehicle	(MT/month)	33.48	61.89	73.59	74.27	74.41	70.23	81.86	71.20	78.33	50.64	49.63	50.43	52.74	16.78
Offsite Haul Truck	(MT/month)	7.98	5.75	13.31	13.31	24.48	26.61	26.17	24.08	28.27	13.09	13.61	13.61	13.09	0.00
Offsite Delivery Truck	(MT/month)	2.23	2.44	5.58	5.84	11.69	11.15	24.03	20.90	22.99	21.94	12.02	10.97	2.30	2.40
Offsite Worker Travel	(MT/month)	8.10	10.77	18.51	28.48	38.18	44.54	73.85	65.28	72.39	79.13	84.22	57.95	47.29	12.21
Onsite Off-Road Equipment	12-month rolling total (MT/year)												7.66E+02	7.85E+02	7.40E+02
Onsite Off-Road + Onsite Vehicle	12-month rolling total (MT/year)												7.70E+02	7.89E+02	7.44E+02
Offsite Haul Truck	12-month rolling total (MT/year)												2.10E+02	2.15E+02	2.10E+02
Offsite Delivery Truck	12-month rolling total (MT/year)												1.52E+02	1.52E+02	1.52E+02
Offsite Worker Travel	12-month rolling total (MT/year)												5.81E+02	6.21E+02	6.22E+02
		CH4													
Onsite Off-Road Equipment	(MT/month)	5.87E-03	1.45E-02	1.55E-02	1.54E-02	1.54E-02	1.82E-02	2.16E-02	1.88E-02	2.07E-02	1.25E-02	1.19E-02	1.25E-02	1.31E-02	1.81E-03
Onsite Vehicle	(MT/month)	1.71E-06	1.99E-06	3.70E-06	5.15E-06	7.37E-06	8.39E-06	1.27E-05	1.13E-05	1.27E-05	1.27E-05	1.31E-05	9.33E-06	7.52E-06	1.84E-06
Onsite Off-Road + Onsite Vehicle	(MT/month)	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.00
Offsite Haul Truck	(MT/month)	6.00E-05	4.00E-05	1.00E-04	1.00E-04	1.80E-04	1.90E-04	1.90E-04	1.80E-04	2.10E-04	1.00E-04	1.00E-04	1.00E-04	1.00E-04	0.00E+00
Offsite Delivery Truck	(MT/month)	1.00E-05	2.00E-05	4.00E-05	4.00E-05	7.00E-05	7.00E-05	1.50E-04	1.30E-04	1.50E-04	1.40E-04	8.00E-05	7.00E-05	1.00E-05	2.00E-05
Offsite Worker Travel	(MT/month)	4.30E-04	5.70E-04	9.80E-04	1.51E-03	2.03E-03	2.37E-03	3.79E-03	3.35E-03	3.71E-03	4.06E-03	4.32E-03	2.97E-03	2.43E-03	6.30E-04
Onsite Off-Road Equipment	12-month rolling total (MT/year)												1.83E-01	1.90E-01	1.77E-01
Onsite Off-Road + Onsite Vehicle	12-month rolling total (MT/year)												1.83E-01	1.90E-01	1.78E-01
Offsite Haul Truck	12-month rolling total (MT/year)												1.55E-03	1.59E-03	1.55E-03
Offsite Delivery Truck	12-month rolling total (MT/year)												9.70E-04	9.70E-04	9.70E-04
Offsite Worker Travel	12-month rolling total (MT/year)												3.01E-02	3.21E-02	3.22E-02
		N2O													
Onsite Off-Road Equipment	(MT/month)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Onsite Vehicle	(MT/month)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Onsite Off-Road + Onsite Vehicle	(MT/month)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite Haul Truck	(MT/month)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite Delivery Truck	(MT/month)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite Worker Travel	(MT/month)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Onsite Off-Road Equipment	12-month rolling total (MT/year)												0	0	0
Onsite Off-Road + Onsite Vehicle	12-month rolling total (MT/year)												0	0	0
Offsite Haul Truck	12-month rolling total (MT/year)												0	0	0
Offsite Delivery Truck	12-month rolling total (MT/year)												0	0	0
Offsite Worker Travel	12-month rolling total (MT/year)												0	0	0
		CO2e													
Onsite Off-Road Equipment	(MT/month)	33.53	62.17	73.79	74.44	74.44	70.29	81.86	71.18	78.30	50.51	49.52	50.42	52.82	16.78
Onsite Vehicle	(MT/month)	0.097	0.088	0.186	0.215	0.361	0.392	0.540	0.483	0.547	0.441	0.404	0.326	0.245	0.047
Onsite Off-Road + Onsite Vehicle	(MT/month)	33.62	62.26	73.98	74.65	74.80	70.69	82.40	71.67	78.85	50.95	49.92	50.75	53.07	16.83
Offsite Haul Truck	(MT/month)	7.98	5.75	13.31	13.31	24.49	26.61	26.18	24.08	28.27	13.09	13.61	13.61	13.09	0.00
Offsite Delivery Truck	(MT/month)	2.23	2.44	5.58	5.84	11.69	11.16	24.03	20.90	22.99	21.94	12.02	10.97	2.30	2.40
Offsite Worker Travel	(MT/month)	8.11	10.78	18.53	28.52	38.23	44.60	73.94	65.36	72.48	79.23	84.33	58.03	47.35	12.22
Onsite Off-Road Equipment	12-month rolling total (MT/year)												770.45	789.75	744.36
Onsite Off-Road + Onsite Vehicle	12-month rolling total (MT/year)												774.53	793.97	748.54
Offsite Haul Truck	12-month rolling total (MT/year)												210.30	215.40	209.65
Offsite Delivery Truck	12-month rolling total (MT/year)												151.80	151.87	151.83
Offsite Worker Travel	12-month rolling total (MT/year)												582.14	621.38	622.82

TABLE 4.1F-9

Construction of the PRP – Summer (Peak) Daily Emissions

Project Month		1	2	3	4	5	6	7	8	9	10	11	12	13	14
								ROG							
Onsite Off-Road Equipment	(lb/day)	0.5806	0.9737	1.1740	1.1045	1.1045	1.1207	1.2102	1.2102	1.2102	0.7848	0.6953	0.7620	0.7620	0.1854
Onsite Vehicle	(lb/day)	0.0020	0.0016	0.0037	0.0041	0.0069	0.0078	0.0093	0.0096	0.0099	0.0081	0.0067	0.0060	0.0043	0.0007
Onsite Off-Road + Onsite Vehicle	(lb/day)	0.5826	0.9753	1.1777	1.1086	1.1114	1.1285	1.2195	1.2198	1.2201	0.7929	0.7020	0.7680	0.7663	0.1861
Offsite Haul Truck	(lb/day)	0.1671	0.1098	0.2785	0.2658	0.4891	0.5569	0.5032	0.5324	0.5682	0.2756	0.2617	0.2866	0.2630	0.0000
Offsite Delivery Truck	(lb/day)	0.0443	0.0443	0.1107	0.1107	0.2214	0.2214	0.4255	0.4255	0.4255	0.4255	0.2128	0.2128	0.0426	0.0426
Offsite Worker Travel	(lb/day)	0.1485	0.1803	0.3393	0.4984	0.6681	0.8165	1.1092	1.1275	1.1367	1.3017	1.2650	0.9534	0.7425	0.1833
								NOx							
Onsite Off-Road Equipment	(lb/day)	12.4951	17.4886	23.1864	21.5989	21.5989	21.8605	23.3038	23.3038	23.3038	16.0183	14.5749	16.9639	16.9639	6.3530
Onsite Vehicle	(lb/day)	0.0274	0.0200	0.0497	0.0491	0.0903	0.1004	0.1082	0.1120	0.1165	0.0810	0.0603	0.0613	0.0419	0.0050
Onsite Off-Road + Onsite Vehicle	(lb/day)	12.5225	17.5086	23.2361	21.6480	21.6892	21.9609	23.4120	23.4158	23.4203	16.0993	14.6352	17.0252	17.0058	6.3580
Offsite Haul Truck	(lb/day)	2.8594	1.8797	4.7656	4.5490	8.3702	9.5313	8.0779	8.5464	9.1207	4.4236	4.2005	4.6006	4.2225	0.0000
Offsite Delivery Truck	(lb/day)	0.7443	0.7443	1.8606	1.8606	3.7212	3.7212	6.7847	6.7847	6.7847	6.7847	3.3924	3.3924	0.6785	0.6785
Offsite Worker Travel	(lb/day)	0.3591	0.4361	0.8208	1.2056	1.6160	1.9751	2.8196	2.8662	2.8895	3.3090	3.2157	2.4235	1.8875	0.4661
								CO							
Onsite Off-Road Equipment	(lb/day)	21.1699	32.4404	42.7220	40.5783	40.5783	41.1057	44.0147	44.0147	44.0147	30.2949	27.3859	31.4971	31.4971	10.8146
Onsite Vehicle	(lb/day)	0.0278	0.0259	0.0558	0.0679	0.1054	0.1230	0.1573	0.1612	0.1649	0.1559	0.1410	0.1160	0.0873	0.0180
Onsite Off-Road + Onsite Vehicle	(lb/day)	21.1977	32.4663	42.7778	40.6462	40.6837	41.2287	44.1720	44.1759	44.1796	30.4508	27.5269	31.6131	31.5844	10.8326
Offsite Haul Truck	(lb/day)	1.7097	1.1239	2.8495	2.7199	5.0047	5.6989	5.1087	5.4050	5.7682	2.7976	2.6565	2.9095	2.6705	0.0000
Offsite Delivery Truck	(lb/day)	0.4070	0.4070	1.0174	1.0174	2.0348	2.0348	3.8717	3.8717	3.8717	3.8717	1.9358	1.9358	0.3872	0.3872
Offsite Worker Travel	(lb/day)	4.4496	5.4030	10.1704	14.9378	20.0230	24.4726	34.9501	35.5278	35.8166	41.0158	39.8604	30.0397	23.3963	5.7769
								SO2							
Onsite Off-Road Equipment	(lb/day)	0.0370	0.0599	0.0783	0.0755	0.0755	0.0734	0.0789	0.0789	0.0789	0.0531	0.0476	0.0530	0.0530	0.0167
Onsite Vehicle	(lb/day)	0.0001	0.0001	0.0002	0.0002	0.0004	0.0004	0.0006	0.0006	0.0006	0.0005	0.0005	0.0004	0.0003	0.0001
Onsite Off-Road + Onsite Vehicle	(lb/day)	0.0371	0.0600	0.0785	0.0757	0.0759	0.0738	0.0795	0.0795	0.0795	0.0536	0.0481	0.0534	0.0533	0.0168
Offsite Haul Truck	(lb/day)	0.0084	0.0056	0.0141	0.0134	0.0247	0.0281	0.0257	0.0272	0.0290	0.0141	0.0134	0.0146	0.0134	0.0000
Offsite Delivery Truck	(lb/day)	0.0024	0.0024	0.0059	0.0059	0.0118	0.0118	0.0236	0.0236	0.0236	0.0236	0.0118	0.0118	0.0024	0.0024
Offsite Worker Travel	(lb/day)	0.0109	0.0132	0.0249	0.0366	0.0490	0.0599	0.0941	0.0957	0.0965	0.1105	0.1074	0.0809	0.0630	0.0156
								PM10							
Onsite Off-Road Equipment	(lb/day)	0.1124	0.1520	0.1779	0.1130	0.1130	0.1146	0.1236	0.1236	0.1236	0.0832	0.0742	0.0831	0.0831	0.0232
Onsite Vehicle	(lb/day)	0.0004	0.0003	0.0008	0.0008	0.0015	0.0016	0.0019	0.0020	0.0020	0.0015	0.0011	0.0011	0.0007	0.0001
Onsite Off-Road + Onsite Vehicle	(lb/day)	0.1128	0.1523	0.1787	0.1138	0.1145	0.1162	0.1255	0.1256	0.1256	0.0847	0.0753	0.0842	0.0838	0.0233
Offsite Haul Truck	(lb/day)	0.0432	0.0284	0.0719	0.0687	0.1263	0.1439	0.1313	0.1389	0.1482	0.0719	0.0683	0.0748	0.0686	0.0000
Offsite Delivery Truck	(lb/day)	0.0137	0.0137	0.0341	0.0341	0.0683	0.0683	0.1288	0.1288	0.1288	0.1288	0.0644	0.0644	0.0129	0.0129
Offsite Worker Travel	(lb/day)	0.0072	0.0087	0.0165	0.0242	0.0324	0.0396	0.0601	0.0611	0.0616	0.0705	0.0685	0.0516	0.0402	0.0099
Onsite Fugitive (Off-Road)	(lb/day)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Onsite Fugitive (Onsite Vehicle)	(lb/day)	0.0040	0.0039	0.0083	0.0105	0.0158	0.0185	0.0268	0.0273	0.0278	0.0280	0.0254	0.0204	0.0152	0.0035
Onsite Off-Road + Onsite Vehicle	(lb/day)	0.0040	0.0039	0.0083	0.0105	0.0158	0.0185	0.0268	0.0273	0.0278	0.0280	0.0254	0.0204	0.0152	0.0035
Offsite Fugitive - Haul Truck	(lb/day)	0.1854	0.1219	0.3090	0.2949	0.5426	0.6179	0.5643	0.5970	0.6371	0.3090	0.2934	0.3214	0.2950	0.0000
Offsite Fugitive - Delivery Truck	(lb/day)	0.0674	0.0674	0.1684	0.1684	0.3367	0.3367	0.6736	0.6736	0.6736	0.6736	0.3368	0.3368	0.0674	0.0674
Offsite Fugitive - Worker Travel	(lb/day)	0.7844	0.9525	1.7929	2.6333	3.5297	4.3141	6.7793	6.8914	6.9474	7.9559	7.7318	5.8268	4.5382	1.1206

TABLE 4.1F-9 (CONT.)

Construction of the PRP – Summer (Peak) Daily Emissions

Project Month		1	2	3	4	5	6	7	8	9	10	11	12	13	14
		PM2.5													
Onsite Off-Road Equipment	(lb/day)	0.1124	0.1520	0.1779	0.1130	0.1130	0.1146	0.1236	0.1236	0.1236	0.0832	0.0742	0.0831	0.0831	0.0232
Onsite Vehicle	(lb/day)	0.0004	0.0003	0.0007	0.0007	0.0013	0.0015	0.0017	0.0018	0.0019	0.0013	0.0010	0.0010	0.0007	0.0001
Onsite Off-Road + Onsite Vehicle	(lb/day)	0.1128	0.1523	0.1786	0.1137	0.1143	0.1161	0.1253	0.1254	0.1255	0.0845	0.0752	0.0841	0.0838	0.0233
Offsite Haul Truck	(lb/day)	0.0397	0.0261	0.0662	0.0632	0.1162	0.1323	0.1207	0.1277	0.1363	0.0661	0.0628	0.0688	0.0631	0.0000
Offsite Delivery Truck	(lb/day)	0.0126	0.0126	0.0314	0.0314	0.0628	0.0628	0.1185	0.1185	0.1185	0.1185	0.0592	0.0592	0.0119	0.0119
Offsite Worker Travel	(lb/day)	0.0066	0.0081	0.0152	0.0223	0.0299	0.0365	0.0556	0.0565	0.0570	0.0652	0.0634	0.0478	0.0372	0.0092
Onsite Fugitive (Off-Road)	(lb/day)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Onsite Fugitive (Onsite Vehicle)	(lb/day)	0.0011	0.0011	0.0022	0.0028	0.0043	0.0050	0.0073	0.0074	0.0075	0.0076	0.0068	0.0055	0.0041	0.0009
Onsite Off-Road + Onsite Vehicle	(lb/day)	0.0011	0.0011	0.0022	0.0028	0.0043	0.0050	0.0073	0.0074	0.0075	0.0076	0.0068	0.0055	0.0041	0.0009
Offsite Fugitive - Haul Truck	(lb/day)	0.0511	0.0336	0.0852	0.0814	0.1497	0.1705	0.1557	0.1647	0.1758	0.0852	0.0809	0.0887	0.0814	0.0000
Offsite Fugitive - Delivery Truck	(lb/day)	0.0193	0.0193	0.0483	0.0483	0.0966	0.0966	0.1933	0.1933	0.1933	0.1933	0.0967	0.0967	0.0193	0.0193
Offsite Fugitive - Worker Travel	(lb/day)	0.2093	0.2541	0.4783	0.7025	0.9417	1.1509	1.8086	1.8385	1.8534	2.1225	2.0627	1.5545	1.2107	0.2989
		CO2													
Onsite Off-Road Equipment	(lb/day)	3504.15	5924.34	7705.91	7420.95	7420.95	7331.76	7794.88	7794.88	7794.88	5269.63	4717.99	5260.43	5260.43	1603.99
Onsite Vehicle	(lb/day)	10.28	8.56	19.72	21.83	36.60	41.70	52.60	54.07	55.63	47.25	39.70	34.96	25.11	4.62
Onsite Off-Road + Onsite Vehicle	(lb/day)	3514.43	5932.90	7725.63	7442.78	7457.55	7373.46	7847.48	7848.95	7850.52	5316.88	4757.69	5295.39	5285.54	1608.61
Offsite Haul Truck	(lb/day)	838.59	551.28	1397.65	1334.12	2454.79	2795.30	2510.34	2655.94	2834.40	1374.71	1305.38	1429.70	1312.22	0.00
Offsite Delivery Truck	(lb/day)	234.36	234.36	585.91	585.91	1171.82	1171.82	2304.93	2304.93	2304.93	2304.93	1152.47	1152.47	230.49	230.49
Offsite Worker Travel	(lb/day)	886.93	1076.98	2027.26	2977.53	3991.16	4878.09	7385.00	7507.07	7568.10	8666.69	8422.56	6347.44	4943.68	1220.66
		CH4													
Onsite Off-Road Equipment	(lb/day)	0.6161	1.3905	1.6257	1.5384	1.5384	1.9140	2.0694	2.0694	2.0694	1.3150	1.1432	1.3121	1.3121	0.1738
Onsite Vehicle	(lb/day)	0.0002	0.0002	0.0004	0.0005	0.0007	0.0009	0.0012	0.0012	0.0013	0.0013	0.0013	0.0010	0.0008	0.0002
Onsite Off-Road + Onsite Vehicle	(lb/day)	0.6163	1.3907	1.6261	1.5389	1.5391	1.9149	2.0706	2.0706	2.0707	1.3163	1.1445	1.3131	1.3129	0.1740
Offsite Haul Truck	(lb/day)	0.0060	0.0040	0.0100	0.0096	0.0176	0.0201	0.0185	0.0196	0.0209	0.0102	0.0096	0.0106	0.0097	0.0000
Offsite Delivery Truck	(lb/day)	0.0015	0.0015	0.0037	0.0037	0.0074	0.0074	0.0147	0.0147	0.0147	0.0147	0.0073	0.0073	0.0015	0.0015
Offsite Worker Travel	(lb/day)	0.0452	0.0548	0.1032	0.1516	0.2032	0.2484	0.3632	0.3692	0.3722	0.4262	0.4142	0.3121	0.2431	0.0600
		N2O													
Onsite Off-Road Equipment	(lb/day)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Onsite Vehicle	(lb/day)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Onsite Off-Road + Onsite Vehicle	(lb/day)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Offsite Haul Truck	(lb/day)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Offsite Delivery Truck	(lb/day)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Offsite Worker Travel	(lb/day)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
		CO2e													
Onsite Off-Road Equipment	(lb/day)	3,519.55	5,959.10	7,746.56	7,459.41	7,459.41	7,379.61	7,846.62	7,846.62	7,846.62	5,302.51	4,746.57	5,293.23	5,293.23	1,608.33
Onsite Vehicle	(lb/day)	10.28	8.56	19.73	21.85	36.62	41.72	52.63	54.10	55.66	47.28	39.73	34.99	25.13	4.63
Onsite Off-Road + Onsite Vehicle	(lb/day)	3,529.84	5,967.67	7,766.28	7,481.25	7,496.02	7,421.33	7,899.25	7,900.72	7,902.28	5,349.79	4,786.30	5,328.22	5,318.36	1,612.96
Offsite Haul Truck	(lb/day)	838.74	551.38	1,397.90	1,334.36	2,455.23	2,795.81	2,510.80	2,656.43	2,834.93	1,374.97	1,305.62	1,429.96	1,312.47	0.00
Offsite Delivery Truck	(lb/day)	234.40	234.40	586.00	586.00	1,172.00	1,172.00	2,305.30	2,305.30	2,305.30	2,305.30	1,152.65	1,152.65	230.53	230.53
Offsite Worker Travel	(lb/day)	888.06	1,078.35	2,029.84	2,981.32	3,996.24	4,884.30	7,394.08	7,516.30	7,577.40	8,677.35	8,432.92	6,355.24	4,949.75	1,222.16

TABLE 4.1F-10

Construction of the PRP – Winter (Peak) Daily Emissions

Project Month		1	2	3	4	5	6	7	8	9	10	11	12	13	14
								ROG							
Onsite Off-Road Equipment	(lb/day)	0.5806	0.9737	1.1740	1.1045	1.1045	1.1207	1.2102	1.2102	1.2102	0.7848	0.6953	0.7620	0.7620	0.1854
Onsite Vehicle	(lb/day)	0.0020	0.0016	0.0038	0.0041	0.0070	0.0080	0.0095	0.0097	0.0101	0.0081	0.0067	0.0061	0.0044	0.0007
Onsite Off-Road + Onsite Vehicle	(lb/day)	0.5826	0.9753	1.1778	1.1086	1.1115	1.1287	1.2197	1.2199	1.2203	0.7929	0.7020	0.7681	0.7664	0.1861
Offsite Haul Truck	(lb/day)	0.1734	0.1140	0.2890	0.2759	0.5077	0.5781	0.5207	0.5509	0.5880	0.2852	0.2708	0.2966	0.2722	0.0000
Offsite Delivery Truck	(lb/day)	0.0457	0.0457	0.1143	0.1143	0.2285	0.2285	0.4383	0.4383	0.4383	0.4383	0.2192	0.2192	0.0438	0.0438
Offsite Worker Travel	(lb/day)	0.1460	0.1773	0.3337	0.4902	0.6570	0.8030	1.0830	1.1009	1.1099	1.2710	1.2352	0.9309	0.7250	0.1790
								NOx							
Onsite Off-Road Equipment	(lb/day)	12.4951	17.4886	23.1864	21.5989	21.5989	21.8605	23.3038	23.3038	23.3038	16.0183	14.5749	16.9639	16.9639	6.3530
Onsite Vehicle	(lb/day)	0.0285	0.0208	0.0517	0.0511	0.0940	0.1045	0.1127	0.1167	0.1214	0.0846	0.0632	0.0640	0.0438	0.0053
Onsite Off-Road + Onsite Vehicle	(lb/day)	12.5236	17.5094	23.2381	21.6500	21.6929	21.9650	23.4165	23.4205	23.4252	16.1029	14.6381	17.0279	17.0077	6.3583
Offsite Haul Truck	(lb/day)	2.9641	1.9485	4.9401	4.7155	8.6766	9.8802	8.3734	8.8590	9.4543	4.5854	4.3542	4.7688	4.3770	0.0000
Offsite Delivery Truck	(lb/day)	0.7721	0.7721	1.9302	1.9302	3.8604	3.8604	7.0373	7.0373	7.0373	7.0373	3.5186	3.5186	0.7037	0.7037
Offsite Worker Travel	(lb/day)	0.3986	0.4840	0.9111	1.3382	1.7938	2.1924	3.1296	3.1813	3.2072	3.6727	3.5693	2.6899	2.0950	0.5173
								CO							
Onsite Off-Road Equipment	(lb/day)	21.1699	32.4404	42.7220	40.5783	40.5783	41.1057	44.0147	44.0147	44.0147	30.2949	27.3859	31.4971	31.4971	10.8146
Onsite Vehicle	(lb/day)	0.0287	0.0259	0.0568	0.0675	0.1066	0.1238	0.1557	0.1597	0.1637	0.1503	0.1344	0.1122	0.0841	0.0167
Onsite Off-Road + Onsite Vehicle	(lb/day)	21.1986	32.4663	42.7788	40.6458	40.6849	41.2295	44.1704	44.1744	44.1784	30.4452	27.5203	31.6093	31.5812	10.8313
Offsite Haul Truck	(lb/day)	1.9340	1.2714	3.2234	3.0768	5.6614	6.4467	5.7923	6.1282	6.5400	3.1720	3.0120	3.2988	3.0278	0.0000
Offsite Delivery Truck	(lb/day)	0.4489	0.4489	1.1223	1.1223	2.2446	2.2446	4.2859	4.2859	4.2859	4.2859	2.1430	2.1430	0.4286	0.4286
Offsite Worker Travel	(lb/day)	4.0403	4.9060	9.2349	13.5638	18.1812	22.2215	31.5776	32.0995	32.3605	37.0580	36.0141	27.1411	21.1387	5.2194
								SO2							
Onsite Off-Road Equipment	(lb/day)	0.0370	0.0599	0.0783	0.0755	0.0755	0.0734	0.0789	0.0789	0.0789	0.0531	0.0476	0.0530	0.0530	0.0167
Onsite Vehicle	(lb/day)	0.0001	0.0001	0.0002	0.0002	0.0004	0.0004	0.0006	0.0006	0.0006	0.0005	0.0004	0.0004	0.0003	0.0001
Onsite Off-Road + Onsite Vehicle	(lb/day)	0.0371	0.0600	0.0785	0.0757	0.0759	0.0738	0.0795	0.0795	0.0795	0.0536	0.0480	0.0534	0.0533	0.0168
Offsite Haul Truck	(lb/day)	0.0084	0.0055	0.0141	0.0134	0.0247	0.0281	0.0257	0.0271	0.0290	0.0141	0.0133	0.0146	0.0134	0.0000
Offsite Delivery Truck	(lb/day)	0.0024	0.0024	0.0059	0.0059	0.0118	0.0118	0.0236	0.0236	0.0236	0.0236	0.0118	0.0118	0.0024	0.0024
Offsite Worker Travel	(lb/day)	0.0103	0.0125	0.0235	0.0345	0.0462	0.0565	0.0887	0.0902	0.0909	0.1041	0.1012	0.0762	0.0594	0.0147
								PM10							
Onsite Off-Road Equipment	(lb/day)	0.1124	0.1520	0.1779	0.1130	0.1130	0.1146	0.1236	0.1236	0.1236	0.0832	0.0742	0.0831	0.0831	0.0232
Onsite Vehicle	(lb/day)	0.0004	0.0003	0.0008	0.0008	0.0015	0.0016	0.0019	0.0020	0.0020	0.0015	0.0011	0.0011	0.0007	0.0001
Onsite Off-Road + Onsite Vehicle	(lb/day)	0.1128	0.1523	0.1787	0.1138	0.1145	0.1162	0.1255	0.1256	0.1256	0.0847	0.0753	0.0842	0.0838	0.0233
Offsite Haul Truck	(lb/day)	0.0432	0.0284	0.0720	0.0688	0.1265	0.1441	0.1314	0.1391	0.1484	0.0720	0.0683	0.0749	0.0687	0.0000
Offsite Delivery Truck	(lb/day)	0.0137	0.0137	0.0342	0.0342	0.0684	0.0684	0.1290	0.1290	0.1290	0.1290	0.0645	0.0645	0.0129	0.0129
Offsite Worker Travel	(lb/day)	0.0072	0.0087	0.0165	0.0242	0.0324	0.0396	0.0601	0.0611	0.0616	0.0705	0.0685	0.0516	0.0402	0.0099
Onsite Fugitive (Off-Road)	(lb/day)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Onsite Fugitive (Onsite Vehicle)	(lb/day)	0.0040	0.0039	0.0083	0.0105	0.0158	0.0185	0.0268	0.0273	0.0278	0.0280	0.0254	0.0204	0.0152	0.0035
Onsite Off-Road + Onsite Vehicle	(lb/day)	0.0040	0.0039	0.0083	0.0105	0.0158	0.0185	0.0268	0.0273	0.0278	0.0280	0.0254	0.0204	0.0152	0.0035
Offsite Fugitive - Haul Truck	(lb/day)	0.1854	0.1219	0.3090	0.2949	0.5426	0.6179	0.5643	0.5970	0.6371	0.3090	0.2934	0.3214	0.2950	0.0000
Offsite Fugitive - Delivery Truck	(lb/day)	0.0674	0.0674	0.1684	0.1684	0.3367	0.3367	0.6736	0.6736	0.6736	0.6736	0.3368	0.3368	0.0674	0.0674
Offsite Fugitive - Worker Travel	(lb/day)	0.7844	0.9525	1.7929	2.6333	3.5297	4.3141	6.7793	6.8914	6.9474	7.9559	7.7318	5.8268	4.5382	1.1206

TABLE 4.1F-10 (CONT.)
Construction of the PRP – Winter (Peak) Daily Emissions

Project Month		1	2	3	4	5	6	7	8	9	10	11	12	13	14
		PM2.5													
Onsite Off-Road Equipment	(lb/day)	0.1124	0.1520	0.1779	0.1130	0.1130	0.1146	0.1236	0.1236	0.1236	0.0832	0.0742	0.0831	0.0831	0.0232
Onsite Vehicle	(lb/day)	0.0004	0.0003	0.0007	0.0007	0.0013	0.0015	0.0018	0.0018	0.0019	0.0013	0.0010	0.0010	0.0007	0.0001
Onsite Off-Road + Onsite Vehicle	(lb/day)	0.1128	0.1523	0.1786	0.1137	0.1143	0.1161	0.1254	0.1254	0.1255	0.0845	0.0752	0.0841	0.0838	0.0233
Offsite Haul Truck	(lb/day)	0.0398	0.0261	0.0663	0.0633	0.1164	0.1325	0.1209	0.1279	0.1365	0.0662	0.0629	0.0689	0.0632	0.0000
Offsite Delivery Truck	(lb/day)	0.0126	0.0126	0.0315	0.0315	0.0629	0.0629	0.1187	0.1187	0.1187	0.1187	0.0593	0.0593	0.0119	0.0119
Offsite Worker Travel	(lb/day)	0.0066	0.0081	0.0152	0.0223	0.0299	0.0365	0.0556	0.0565	0.0570	0.0652	0.0634	0.0478	0.0372	0.0092
Onsite Fugitive (Off-Road)	(lb/day)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Onsite Fugitive (Onsite Vehicle)	(lb/day)	0.0011	0.0011	0.0022	0.0028	0.0043	0.0050	0.0073	0.0074	0.0075	0.0076	0.0068	0.0055	0.0041	0.0009
Onsite Off-Road + Onsite Vehicle	(lb/day)	0.0011	0.0011	0.0022	0.0028	0.0043	0.0050	0.0073	0.0074	0.0075	0.0076	0.0068	0.0055	0.0041	0.0009
Offsite Fugitive - Haul Truck	(lb/day)	0.0511	0.0336	0.0852	0.0814	0.1497	0.1705	0.1557	0.1647	0.1758	0.0852	0.0809	0.0887	0.0814	0.0000
Offsite Fugitive - Delivery Truck	(lb/day)	0.0193	0.0193	0.0483	0.0483	0.0966	0.0966	0.1933	0.1933	0.1933	0.1933	0.0967	0.0967	0.0193	0.0193
Offsite Fugitive - Worker Travel	(lb/day)	0.2093	0.2541	0.4783	0.7025	0.9417	1.1509	1.8086	1.8385	1.8534	2.1225	2.0627	1.5545	1.2107	0.2989
		CO2													
Onsite Off-Road Equipment	(lb/day)	3504.15	5924.34	7705.91	7420.95	7420.95	7331.76	7794.88	7794.88	7794.88	5269.63	4717.99	5260.43	5260.43	1603.99
Onsite Vehicle	(lb/day)	10.13	8.38	19.38	21.35	35.94	40.89	51.39	52.85	54.40	45.86	38.36	33.94	24.32	4.43
Onsite Off-Road + Onsite Vehicle	(lb/day)	3514.28	5932.72	7725.29	7442.29	7456.88	7372.65	7846.28	7847.73	7849.28	5315.49	4756.35	5294.37	5284.75	1608.42
Offsite Haul Truck	(lb/day)	837.35	550.47	1395.58	1332.15	2451.15	2791.16	2506.62	2652.00	2830.20	1372.67	1303.44	1427.58	1310.28	0.00
Offsite Delivery Truck	(lb/day)	234.00	234.00	585.01	585.01	1170.01	1170.01	2301.38	2301.38	2301.38	2301.38	1150.69	1150.69	230.14	230.14
Offsite Worker Travel	(lb/day)	836.54	1015.80	1912.10	2808.40	3764.45	4600.99	6964.94	7080.06	7137.62	8173.73	7943.48	5986.39	4662.48	1151.23
		CH4													
Onsite Off-Road Equipment	(lb/day)	0.6161	1.3905	1.6257	1.5384	1.5384	1.9140	2.0694	2.0694	2.0694	1.3150	1.1432	1.3121	1.3121	0.1738
Onsite Vehicle	(lb/day)	1.80E-04	1.90E-04	3.83E-04	5.13E-04	7.39E-04	8.82E-04	1.23E-03	1.25E-03	1.27E-03	1.33E-03	1.26E-03	9.83E-04	7.53E-04	1.73E-04
Onsite Off-Road + Onsite Vehicle	(lb/day)	0.62	1.39	1.63	1.54	1.54	1.91	2.07	2.07	2.07	1.32	1.14	1.31	1.31	0.17
Offsite Haul Truck	(lb/day)	0.0061	0.0040	0.0101	0.0097	0.0178	0.0202	0.0187	0.0198	0.0211	0.0102	0.0097	0.0107	0.0098	0.0000
Offsite Delivery Truck	(lb/day)	0.0015	0.0015	0.0037	0.0037	0.0075	0.0075	0.0148	0.0148	0.0148	0.0148	0.0074	0.0074	0.0015	0.0015
Offsite Worker Travel	(lb/day)	0.0452	0.0548	0.1032	0.1516	0.2032	0.2484	0.3632	0.3692	0.3722	0.4262	0.4142	0.3121	0.2431	0.0600
		N2O													
Onsite Off-Road Equipment	(lb/day)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Onsite Vehicle	(lb/day)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Onsite Off-Road + Onsite Vehicle	(lb/day)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite Haul Truck	(lb/day)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite Delivery Truck	(lb/day)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite Worker Travel	(lb/day)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		CO2e													
Onsite Off-Road Equipment	(lb/day)	3,519.55	5,959.10	7,746.56	7,459.41	7,459.41	7,379.61	7,846.62	7,846.62	7,846.62	5,302.51	4,746.57	5,293.23	5,293.23	1,608.33
Onsite Vehicle	(lb/day)	10.134	8.386	19.388	21.361	35.955	40.916	51.425	52.878	54.429	45.893	38.388	33.969	24.343	4.436
Onsite Off-Road + Onsite Vehicle	(lb/day)	3,529.69	5,967.49	7,765.94	7,480.77	7,495.36	7,420.53	7,898.04	7,899.50	7,901.05	5,348.40	4,784.96	5,327.20	5,317.57	1,612.77
Offsite Haul Truck	(lb/day)	837.50	550.57	1,395.83	1,332.39	2,451.59	2,791.67	2,507.09	2,652.50	2,830.73	1,372.93	1,303.69	1,427.85	1,310.52	0.00
Offsite Delivery Truck	(lb/day)	234.04	234.04	585.10	585.10	1,170.20	1,170.20	2,301.75	2,301.75	2,301.75	2,301.75	1,150.87	1,150.87	230.17	230.17
Offsite Worker Travel	(lb/day)	837.67	1,017.17	1,914.68	2,812.19	3,769.53	4,607.20	6,974.02	7,089.29	7,146.93	8,184.38	7,953.84	5,994.20	4,668.56	1,152.73

TABLE 4.1F-11
Construction of the PRP – CalEEMod Input Data

Project Name	Pomona Repower Project	
District	Los Angeles County - South Coast	
Wind Speed	2.2	m/s
Precipitation Frequency	33	days/year
Climate Zone	9	
Urbanization Level	Urban	
Expected Operational Year	2019	
Utility Company	Southern California Edison	
CO2 Intensity Factor	630.89	
CH4 Intensity Factor	0.029	
N2O Intensity Factor	0.006	

CalEEMod Phase Name	Phase Type	Start Date	End Date	# day/Week	Number of Days	Month	# of Days, Rolling 12-month
Construction 1	Building Construction	7/1/2017	7/31/2017	5	21	1	
Construction 2	Building Construction	8/1/2017	8/31/2017	5	23	2	
Construction 3	Building Construction	9/1/2017	9/30/2017	5	21	3	
Construction 4	Building Construction	10/1/2017	10/31/2017	5	22	4	
Construction 5	Building Construction	11/1/2017	11/30/2017	5	22	5	
Construction 6	Building Construction	12/1/2017	12/31/2017	5	21	6	
Construction 7	Building Construction	1/1/2018	1/31/2018	5	23	7	
Construction 8	Building Construction	2/1/2018	2/28/2018	5	20	8	
Construction 9	Building Construction	3/1/2018	3/31/2018	5	22	9	
Construction 10	Building Construction	4/1/2018	4/30/2018	5	21	10	
Construction 11	Building Construction	5/1/2018	5/31/2018	5	23	11	
Construction 12	Building Construction	6/1/2018	6/30/2018	5	21	12	260
Construction 13	Building Construction	7/1/2018	7/31/2018	5	22	13	261
Construction 14	Building Construction	8/1/2018	8/31/2018	5	23	14	261

TABLE 4.1F-12

Construction of the PRP – CalEEMod Equipment Schedule Input

Construction Equipment	HP	CalEEMod Equip Type	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Backhoe loader, wheel type, Cat. 420F	93	Rubber Tired Loaders	1	1												
Mini Loader, Cat. 287D	73	Rubber Tired Loaders	1	1	1											
Flatbed truck, 3T rating	190	Off-Highway Trucks		1	1	1	1	1	1	1	1					
Trucks (Water, Fuel, Service, Boom)	175	Off-Highway Trucks		3	3	3	3	3	3	3	3	3	3	3	3	
Concrete Saw	30	Concrete/Industrial Saws	1													
Dump Truck, rear dump 20 CY, Cat. CT13	365	Off-Highway Trucks						1	1	1	1					
Generator, 100 kW output, diesel engine	134	Generator Sets			1	1	1	1	1	1	1	1	1	1	1	1
Dozer	200															
Crane 60 T	250	Cranes			1	1	1	1	1	1	1	1	1	1	1	
Crane 25 T	175	Cranes							1	1	1	1				
Forklift, 5T	120	Forklifts		1	1	1	1	1	1	1	1	1	1	1	1	1
Concrete Pump, 4" Line, 80' Boom	175	Pumps	1	1	1	1	1									
Air Compressor	50	Air Compressors	1	1	1	1	1	1	1	1	1					
Temp Lighting	25	Other General Industrial Equipment			1	1	1	1	1	1	1	1	1	1	1	1
Trencher, RT120	121	Trenchers	1													
Paver, asphalt	120	Pavers												1	1	

TABLE 4.1F-13
Construction of the PRP – CalEEMod Vehicle Trips Input

Project Month	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**
Workers														
Worker/Insulator										8	8	6	4	
Boilmakers							10	10	10	10	10	8	8	
Carpenters		2	2	2	4	4	4	4	4	4	4	2	2	
Cement Finishers		2	2	4	4	6	8	8	8	8	4	2	2	
Common Laborers	2	2	4	4	10	10	10	10	10	10	10	4	4	
Electricians	1	1	1	4	4	10	20	20	20	20	20	10	8	6
Equipment Operators, Heavy	1	1	2	2	2	2	2	2	2	2	2	2		
Equipment Operators, Light	2	1	2	2	2	2	2	2	2	2	2	2		
Equipment Operators, Medium	2	1	2	2	2	2	2	2	2	2	2	2		
Equipment Operators, Oilers	1	1	2	2	2	2	2	2	2	2	2	2		
Mechanical Equipment														
Millwrights				6	6	6	12	20	20	20	20	20	20	1
Plumbers Helper								1	1	2	2	2	2	2
Plumbers								1	1	2	2	2	2	2
Painters,										10	10	8	8	4
Rodmen (Reinforcing)														
Skilled Trade			4	4	4	4	4	4	4	4	4	4	4	
Structural Steel Workers			2	4	8	8	8	4	4	4	4			
Structural Steel Welders			2	4	8	8	8	4	4	4	4			
Steamfitters/Pipefitters			2	2	2	6	20	20	20	20	20	20	10	
Truck Drivers, Heavy	2	2	2	2	2	4	4	4	4	2	2	2	2	
Truck Drivers, Light	2	2	1	1	1	1	1	1	1	1	1	1		
Total Number of Workers	13	15	30	45	61	75	117	119	119	137	133	99	76	15
Total Supervision	1	2	2	2	2	2	4	4	5	5	5	5	5	5
Worker Trips (trips/day)	**14**	**17**	**32**	**47**	**63**	**77**	**121**	**123**	**124**	**142**	**138**	**104**	**81**	**20**
Worker Trips Length (miles), Round Trip	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
Worker Trips, Percent Paved (%)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

TABLE 4.1F-13 (CONT.)
Construction of the PRP – CalEEMod Vehicle Trips Input

Project Month	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**
Delivery Trucks														
Daily Delivery Trucks (One way)	2	2	5	5	10	10	20	20	20	20	10	10	2	2
Monthly Delivery Trucks (One way)	50	50	125	125	230	250	500	460	540	500	260	260	50	54
Delivery Truck Trips Length	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
Delivery Truck Trips, Percent Paved (%)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Haul Trucks														
Daily Hauling Trucks (One way)	6	4	10	10	20	20	20	20	20	10	10	10	10	
Monthly Hauling Trucks (One way)	150	108	250	250	460	500	500	460	540	250	260	260	250	0
Haul Truck Trip Length (miles, one way)	32	32	32	32	32	32	32	32	32	32	32	32	32	32
Haul Truck Trips, Percent Paved (%)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%